Michigan Pneumatic Tool

Industrial Air Tools

Serving All Industries
- Aircraft
- Assembly
- Automotive
- Petro Chemical
- Rental
- Foundry
- Construction

1-800-521-8104 • www.michiganpneumatic.com
The Michigan Pneumatic Tool Experts Deliver The Solutions To Your Air Tool Needs

Need to know where to turn for the right tools for your job? Our dedicated team has the experience and know-how to give you the quality products and service you require. Take advantage of our knowledge today for the solutions to your air tool needs.

Michigan Pneumatic air tools are designed to be safe, dependable and affordable. Our products are highly engineered to meet our rigid quality standards. Every tool in the MPT line is tested for performance, strength, durability and precision accuracy to ensure unsurpassed quality. This quality, plus great savings, is reflected in the increasing number of MPT tools found in every industry around the world.

MPT tools are completely guaranteed. When a tool shows signs of wear and parts need to be replaced, we are ready to provide any part you need from our large inventory. You are assured fast, reliable service from company you know and trust.
The **MPT** Promise

Michigan Pneumatic is committed to providing top quality products designed to stand up under the most rigorous applications, as well as providing fully personalized service for every sale by our qualified staff. We promise to every MPT distributor and end user to maintain our standard of high dependability at competitive and reasonable prices. We insist upon quality, and backup every product with our MPT warranty. That’s a promise we strive to keep.

Full Line Inventory

Michigan Pneumatic maintains millions of dollars of inventory, in a wide selection of tools and equipment for a wide range of business and industries. Our product line includes all kinds of hoisting and material handling equipment; a complete line of air tools and accessories for every job, from sanders, hammers, impacts and grinders to powerful tuggers. Our service oriented company and well-stocked warehouse assure fast, dependable delivery.

Parts Department

We at MPT take pride in the size and efficiency of our parts department. Our goal is to keep a continuous stock of replacement parts for immediate delivery. From the smallest washer to any large housing, you can rely on our parts department for speedy, efficient service. We carry a comprehensive parts inventory for all air tools sold by Michigan Pneumatic Tool, as well as ensuring all parts are available for quick delivery. Rest assured that when replacement parts are needed, our qualified staff can select from one of the largest parts departments in the nation.

Repair Department

Our repair department is staffed by competent technicians who know air tools. Our experienced technicians are trained to rebuild any make of air tool, the factory way. Every tool is completely torn down and examined for wear and tear. Worn parts are replaced to reduce maintenance costs and unnecessary tool replacement. We will furnish an estimate when the cost to repair exceeds 50% of the price of the tool, or when requested. Every repair is completely guaranteed. Send your tools in today.

Pricing Policy

Dependability and fair pricing are features of Michigan Pneumatic. We offer savings of up to 50% in comparison with other manufacturers selling quality industrial tools. How do we do it? We work on a small markup and fast turnover. The customer benefits on the price. You buy with complete confidence because every tool is completely guaranteed.
Dear Customer,

We here at Michigan Pneumatic Tool proudly present our newest, most comprehensive catalog ever. This edition has been carefully compiled to inform you of our wide selection of quality products at reasonable and competitive prices. In addition to our quality tools and equipment that you’ve come to know and trust, we are pleased to introduce the latest new air tool models on the market.

Michigan Pneumatic Tool has always been a service-oriented company, stocking a tremendous variety of tools and equipment for immediate delivery. Most orders are shipped from stock the same day they are received, and as always, our repair department provides you with expert service and replacement parts for all brands of air tools.

All of our products are covered by our unconditional money back guarantee. We take special pride in our selection of tools and the service provided by Michigan Pneumatic Tool, where sixty-six years of experience accompanies every tool.

Our staff promises to provide you with fast and efficient service for all of your air tool requirements.

Yours truly,

Gary Wine
President
Michigan Pneumatic Tool, Inc.

---

**Michigan Pneumatic Stretches Air Tool Buying Power**

As a leader in the industry, Michigan Pneumatic was the first to import quality air tools over forty years ago. Today, combined expertise in this field and tremendous buying power assures you, the customer, of getting more for your money with Michigan Pneumatic.

Significant savings are only part of the Michigan Pneumatic objective. We save you time by offering the ability to compare the advantages of various tools at your convenience. Buy with complete confidence knowing every product is quality tested and completely guaranteed. Michigan Pneumatic insists on quality, and every product is backed up with the Michigan Pneumatic warranty.

---

**LIMITED EXPRESS WARRANTY**

Michigan Pneumatic Tool, Inc. makes every effort to ensure that its products are of high quality, and warrants all new products it sells to be free from defects in materials and workmanship for a period of one hundred eighty (180) days from the date of original purchase. All rebuilt products carry a thirty (30) day warranty.

This warranty shall not apply to defects due, directly or indirectly, to abuse, misuse, negligence, normal wear and tear or improper maintenance, nor shall it apply to any product which has been repaired or altered outside of our facilities.

Should any product fail to provide satisfactory service, return the complete product requiring warranty service to Michigan Pneumatic Tool for examination, with transportation charges prepaid, together with an explanation of the complaint and proof of purchase. Michigan Pneumatic Tool guarantees to repair or replace any product found upon our inspection to be so defective.

Michigan Pneumatic Tool makes no other warranty expressed or implied and expressly disclaims any implied warranty of merchantability or fitness for a particular purpose. There are no warranties which extend beyond the description contained herein.

Michigan Pneumatic Tool shall in no event be liable for death, injuries to persons or property, or for incidental, consequential, indirect or special damages of any nature arising from the sale or use of the products, excepting only the cost or expense of repair and replacement as described above.

This warranty gives the customer specific legal rights. Other legal rights may vary from state to state.

---

**Delivery** : We ship U.P.S., Parcel Post, Air and Freight to all parts of the world. Any shipments over 150 lbs. will be shipped via truck, freight collect.

**Terms** : Net 30 days, FOB Detroit. 1-1/2% service charge per month (18% per annum) will be added on past due invoices. For immediate delivery, if credit has not yet been established, we will gladly ship C.O.D., freight collect, or accept MC/VISA (Some restrictions may apply). When sending a check with your order, add a minimum shipping and handling charge of $8.50. We will bill you for any difference in freight charges.

**Handling Fee** : $4.25 per package (UPS), $5.00 per pallet LTL

**Minimum Billing** : $25.00 Net (50.00 if using Credit Card)

**Returns** : There is a 20% restocking charge on all returns. Before returning items, you must obtain a Return Authorization Number. This must be done within five (5) days of receipt of items. Ship returns, freight prepaid, in the original cartons. Upon receipt of the returned items, in unused and acceptable condition, we will issue a credit to your account.

**Damages/Shortages** : On arrival, the consignments should be carefully and thoroughly inspected for any sign of damage or shortage.

---

Any damage or shortage should be noted on the freight bill before signing the receipt. If the item cannot be inspected properly, we recommend you sign the freight bill marked “Subject To Inspection”. It is your responsibility to report immediately to the carrier any package or crate received in a damaged condition, and to request an inspection report. If you notice any damage after unpacking the shipment, notify the transport company immediately and request an inspection. Damage claims must be made with the carrier.

**NOTE** : All packaging material must be retained until the shipment is inspected by the carrier and your claim is settled.

**Prices** : Prices of any product are subject to change or withdrawal without notice.

**New Accounts** : To open a new account requires a good Dun & Bradstreet rating. New customers should submit a completed credit application. Please allow up to three weeks for processing.

When using a credit card, please have your card number, expiration date, V-code and cardholder’s name ready.
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact Wrenches</td>
<td>4</td>
</tr>
<tr>
<td>Pulsus Tools</td>
<td>17</td>
</tr>
<tr>
<td>Sockets &amp; Screwdriver Accessories</td>
<td>22</td>
</tr>
<tr>
<td>Screwdrivers</td>
<td>26</td>
</tr>
<tr>
<td>Drills</td>
<td>30</td>
</tr>
<tr>
<td>Sanders</td>
<td>44</td>
</tr>
<tr>
<td>Die Grinders &amp; Routeers</td>
<td>53</td>
</tr>
<tr>
<td>Wheel Grinders</td>
<td>62</td>
</tr>
<tr>
<td>Air Nippers &amp; Saws</td>
<td>74</td>
</tr>
<tr>
<td>Shears &amp; Nibblers</td>
<td>80</td>
</tr>
<tr>
<td>Riveters</td>
<td>86</td>
</tr>
<tr>
<td>Air Hammers</td>
<td>99</td>
</tr>
<tr>
<td>Aircraft Riveters</td>
<td>100</td>
</tr>
<tr>
<td>Planishing Hammer Accessories</td>
<td>104</td>
</tr>
<tr>
<td>Rivet Busters</td>
<td>105</td>
</tr>
<tr>
<td>Chipping Hammers</td>
<td>109</td>
</tr>
<tr>
<td>Scalers</td>
<td>115</td>
</tr>
<tr>
<td>Rammers</td>
<td>124</td>
</tr>
<tr>
<td>Clay Diggers &amp; Pavement Breakers</td>
<td>129</td>
</tr>
<tr>
<td>Concrete Vibrators</td>
<td>135</td>
</tr>
<tr>
<td>Rock Drills</td>
<td>136</td>
</tr>
<tr>
<td>Hoists &amp; Tuggers</td>
<td>138</td>
</tr>
<tr>
<td>Trolleys</td>
<td>144</td>
</tr>
<tr>
<td>Tool Balancers &amp; Hose Reels</td>
<td>148</td>
</tr>
<tr>
<td>Clamps &amp; Vises</td>
<td>150</td>
</tr>
<tr>
<td>Air Line Accessories</td>
<td>152</td>
</tr>
<tr>
<td>Filters, Regulators &amp; Lubricators</td>
<td>153</td>
</tr>
<tr>
<td>Air Manifolds</td>
<td>156</td>
</tr>
<tr>
<td>Hoses &amp; Couplers</td>
<td>157</td>
</tr>
<tr>
<td>Air Movers</td>
<td>161</td>
</tr>
<tr>
<td>Index</td>
<td>162</td>
</tr>
</tbody>
</table>
Michigan Pneumatic Model MP-2402P-DD

**Power Ratchet** - 1/2" Square Drive

**Features a ball-type anvil.** Versatility that combines speed with power. Uses include small engine repairs, water pumps, radiators and air conditioning units. Ideal for use in limited work areas. SH-0719RA 1/4" ratchet head assembly available for Model MP-2760C-ST. SH-30RA 3/8" ratchet head assembly available for MP-728-ST. SH-735RA 1/2" ratchet head assembly available for Model MP-1625-ST.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Square Drive</th>
<th>Free Speed</th>
<th>Ultimate Torque</th>
<th>Length</th>
<th>Weight</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-2760C-ST</td>
<td>1/4&quot;</td>
<td>240 rpm</td>
<td>18 ft.-lbs.</td>
<td>6-1/4&quot;</td>
<td>1.0 lb.</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>3.0 cfm</td>
</tr>
<tr>
<td>MP-728-ST</td>
<td>3/8&quot;</td>
<td>150 rpm</td>
<td>50 ft.-lbs.</td>
<td>10&quot;</td>
<td>2.5 lbs.</td>
<td>3/8&quot;</td>
<td>1/4&quot;</td>
<td>4.0 cfm</td>
</tr>
<tr>
<td>MP-1625-ST</td>
<td>1/2&quot;</td>
<td>150 rpm</td>
<td>90 ft.-lbs.</td>
<td>15&quot;</td>
<td>4.5 lbs.</td>
<td>3/8&quot;</td>
<td>1/4&quot;</td>
<td>5.0 cfm</td>
</tr>
</tbody>
</table>

---

Michigan Pneumatic Model MP-720-ST

**Straight Impact** - 3/8" Square Drive

**Features a friction ring anvil.** This compact impact is easily maneuverable for hard to reach places, rugged and lightweight. The aluminum housing is protected by rubber guards. Equipped with swivel air inlet and built-in regulator. Butterfly trigger for better speed control.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Square Drive</th>
<th>Free Speed</th>
<th>Ultimate Torque</th>
<th>Length</th>
<th>Weight</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-720-ST</td>
<td>3/8&quot;</td>
<td>10,000 rpm</td>
<td>75 ft.-lbs.</td>
<td>5-1/2&quot;</td>
<td>2.25 lbs.</td>
<td>3/8&quot;</td>
<td>1/4&quot;</td>
<td>3.0 cfm</td>
</tr>
</tbody>
</table>

---

Ingersoll-Rand Model IR-5000A

**Pistol Impact** - 1/4" Square Drive

**Features a pin-type anvil.** Designed for the removal of small nuts and bolts, assembly line work or for use in restricted quarters. Model MP-5000A-IR with screwdriver attachment available.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Square Drive</th>
<th>Free Speed</th>
<th>Ultimate Torque</th>
<th>Length</th>
<th>Weight</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-5000A-IR</td>
<td>1/4&quot;</td>
<td>1400 rpm</td>
<td>20-40 in.-lbs.</td>
<td>7-7/8&quot;</td>
<td>2.125 lbs.</td>
<td>3/8&quot;</td>
<td>1/4&quot;</td>
<td>6.0 cfm</td>
</tr>
</tbody>
</table>

See pages 22-25 for impact accessories.
Michigan Pneumatic  Model MP-7125

**Angle Impact** - 3/8" Square Drive

**Features a friction ring anvil.** This popular “Angle” 3/8” drive wrench features a rocking dog impact mechanism, built-in power regulator and an instant forward and reverse throttle for speed control. New streamlined design with motor behind clutch mechanism for easy handling.

- Square Drive: 3/8"
- Free Speed: 8000 rpm
- Ultimate Torque: 80 ft.-lbs.
- Rec’d Hose Size: 3/8"
- Length: 4-1/2"
- Weight: 2.5 lbs.
- Air Inlet Thread: 1/4"
- Avg. Air Consumption: 2.6 cfm

Michigan Pneumatic  Model MP-135-ST

**Angle Impact** - 3/8" Square Drive

**Features a friction ring anvil.** Features a built-in regulator for positive speed and torque control and single-handed thru bolt action reverse operation. A ring socket retainer allows for rapid socket changes.

- Square Drive: 3/8"
- Free Speed: 10000 rpm
- Ultimate Torque: 75 ft.-lbs.
- Rec’d Hose Size: 3/8"
- Length: 5"
- Weight: 2.625 lbs.
- Air Inlet Thread: 1/4"
- Avg. Air Consumption: 3.0 cfm

Nippon Pneumatic  Model SW-12

**Angle Impact** - 3/8" Square Drive

**Features a friction ring anvil.** Used mostly in repair shops and garages. Features include lightweight, low air consumption and exceptionally powerful impacting per blow. Also features a built-in power regulator for easy adjustment.

- Square Drive: 3/8"
- Free Speed: 8000 rpm
- Ultimate Torque: 165 ft.-lbs.
- Rec’d Hose Size: 3/8"
- Length: 4-7/8"
- Weight: 2.8 lbs.
- Air Inlet Thread: 1/4"
- Avg. Air Consumption: 3.5 cfm

Michigan Pneumatic  Model MP-SWH-13

**Angle Impact** - 1/2" Square Drive

**Features a pin-type anvil.** Close quarter industrial angle wrench is fully reversible and perfectly balanced for easy maneuverability. Built-in power regulator matches speed and power to each job. **Uses brass end plates for longer wear.**

- Square Drive: 1/2"
- Free Speed: 5800 rpm
- Ultimate Torque: 225 ft.-lbs.
- Rec’d Hose Size: 3/8"
- Length: 7-7/8"
- Weight: 5.3 lbs.
- Air Inlet Thread: 1/4"
- Avg. Air Consumption: 4.0 cfm

Michigan Pneumatic  Model MP-121T-ST

**Pistol Impact** - 1/2" Square Drive

**Features a friction ring anvil.** Medium duty air wrench has a durable, one-piece balanced housing for comfortable use. Equipped with a single hammer rocking dog clutch mechanism. Has a built-in power regulator for adjustable torque output. Ideal for automobile repair work.

- Square Drive: 1/2"
- Free Speed: 7000 rpm
- Ultimate Torque: 250 ft.-lbs.
- Rec’d Hose Size: 3/8"
- Length: 6-1/4"
- Weight: 5.25 lbs.
- Air Inlet Thread: 1/4"
- Avg. Air Consumption: 4.0 cfm

See pages 22-25 for impact accessories.
General Line Impact Wrenches

**Michigan Pneumatic**  
**Model MP-1700**

**Pistol Impact** - 1/2" Square Drive

**Features a friction ring anvil.** Twin Hammer clutch mechanism provides good durability and performance. Excellent weight and balance to reduce operator fatigue. High output motor provides high torque levels for removing nuts. **Model MP-1700P2** with a 2" extended anvil available. **Model MP-1700PA** with pin-type anvil available.

<table>
<thead>
<tr>
<th>Square Drive</th>
<th>1/2&quot;</th>
<th>Length</th>
<th>7&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Speed</td>
<td>6500 rpm</td>
<td>Weight</td>
<td>5.3 lbs.</td>
</tr>
<tr>
<td>Torque Range</td>
<td>37-370 ft.-lbs.</td>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/4&quot;</td>
<td>Avg. Air Consumption</td>
<td>23.8 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic**  
**Model MP-3344**

**Pistol Impact** - 1/2" Square Drive

**Features a pin-type anvil.** Designed for heavy production assembly. Short length for close quarter nutrunning. **Uses brass end plates for longer wear.** **Model MP-3344P2** with a 2" extended anvil available. Industrial model.

<table>
<thead>
<tr>
<th>Square Drive</th>
<th>1/2&quot;</th>
<th>Length</th>
<th>7-1/4&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Speed</td>
<td>7000 rpm</td>
<td>Weight</td>
<td>6.6 lbs.</td>
</tr>
<tr>
<td>Torque Range</td>
<td>100-331 ft.-lbs.</td>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>3/8&quot;</td>
<td>Avg. Air Consumption</td>
<td>5.3 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic**  
**Model MP-2006-ST**

**Pistol Impact** - 3/4" Square Drive

**Features a friction ring anvil.** Twin hammer design built for power and durability. Well-balanced, comfortable grip handle and low noise combine to reduce operator fatigue. Features a three position power regulator built-in.

<table>
<thead>
<tr>
<th>Square Drive</th>
<th>3/4&quot;</th>
<th>Length</th>
<th>8-1/2&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Speed</td>
<td>5500 rpm</td>
<td>Weight</td>
<td>11.2 lbs.</td>
</tr>
<tr>
<td>Torque Range</td>
<td>150-950 ft.-lbs.</td>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/2&quot;</td>
<td>Avg. Air Consumption</td>
<td>60 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic**  
**Model MP-1100-A2**

**Pistol Impact** - 3/4" Square Drive

**Features a friction ring anvil.** Compact, lightweight wrench has an adjustable power regulator for stabilized torque. 2" extended anvil is standard. Good for medium-duty tire repair and heavy-duty automotive repair.

<table>
<thead>
<tr>
<th>Square Drive</th>
<th>3/4&quot;</th>
<th>Length</th>
<th>12&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Speed</td>
<td>5000 rpm</td>
<td>Weight</td>
<td>9.4 lbs.</td>
</tr>
<tr>
<td>Torque Range</td>
<td>125-525 ft.-lbs.</td>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>3/8&quot;</td>
<td>Avg. Air Consumption</td>
<td>7.0 cfm</td>
</tr>
</tbody>
</table>

**Chicago Pneumatic**  
**Model CP-797-6**

**Impact Wrench** - 1" Square Drive

**Features a friction ring anvil.** The 1" workhorse for dependable, reliable service. A truck and trailer tire industry icon.

<table>
<thead>
<tr>
<th>Square Drive</th>
<th>1&quot;</th>
<th>Length</th>
<th>22-1/4&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Speed</td>
<td>5100 rpm</td>
<td>Weight</td>
<td>29.75 lbs.</td>
</tr>
<tr>
<td>Working Torque</td>
<td>150-900 ft.-lbs.</td>
<td>Air Inlet Thread</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/2&quot;</td>
<td>Avg. Air Consumption</td>
<td>12.0 cfm</td>
</tr>
</tbody>
</table>

See pages 22-25 for impact accessories.
General Line Impact Wrenches

Michigan Pneumatic  Model MP-1241P-ST

**Pistol Impact** - 3/8" Square Drive

Features a friction ring anvil. Lightweight, composite motor housing for use in repair shops and garages. Features twin hammer mechanism for power. One hand push button forward-reverse and built-in power regulator.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>10000 rpm</td>
</tr>
<tr>
<td>Working Torque</td>
<td>25-200 ft.-lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>2.6 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>4.0 cfm</td>
</tr>
<tr>
<td>Length</td>
<td>6&quot;</td>
</tr>
</tbody>
</table>

Michigan Pneumatic  Model MP-1243P-ST

**Pistol Impact** - 1/2" Square Drive

Features a friction ring anvil. Twin hammer mechanism for power and durability. Features one hand push button forward-reverse and built-in power regulator.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>11000 rpm</td>
</tr>
<tr>
<td>Working Torque</td>
<td>25-250 ft.-lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>2.6 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>4.0 cfm</td>
</tr>
<tr>
<td>Length</td>
<td>6&quot;</td>
</tr>
</tbody>
</table>

Michigan Pneumatic  Model MP-3143P1-ST

**Pistol Impact** - 1/2" Square Drive

Features a friction ring anvil. Ergonomic handle features a thumb operated three position forward and full power reverse lever. Twin hammer mechanism for power.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>6000 rpm</td>
</tr>
<tr>
<td>Working Torque</td>
<td>50-460 ft.-lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>4.85 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>4.4 cfm</td>
</tr>
<tr>
<td>Length</td>
<td>8&quot;</td>
</tr>
</tbody>
</table>

Ingersoll-Rand  Model IR-2112

**Pistol Impact** - 3/8" Square Drive

Features a friction ring anvil. A new addition to the IR line. Ergonomic, lightweight and very high torque.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>10000 rpm</td>
</tr>
<tr>
<td>Working Torque</td>
<td>20-150 ft.-lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>2.89 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>2.5 cfm</td>
</tr>
<tr>
<td>Length</td>
<td>6&quot;</td>
</tr>
</tbody>
</table>

Ingersoll-Rand  Model IR-2131A

**Pistol Impact** - 1/2" Square Drive

Features a friction ring anvil. Lightweight, ergonomic impact with push button control features extremely high torque in forward and reverse.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>9500 rpm</td>
</tr>
<tr>
<td>Working Torque</td>
<td>50-400 ft.-lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>4.5 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>4.8 cfm</td>
</tr>
<tr>
<td>Length</td>
<td>7&quot;</td>
</tr>
</tbody>
</table>

See pages 22-25 for impact accessories.
**Ingersoll-Rand Model IR-212**

**Pistol Impact** - 3/8” Square Drive

Features a friction ring anvil. Lightweight, high-torque impact wrench, perfect for repair shops and garages — a mechanic’s true best friend.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>3/8”</td>
</tr>
<tr>
<td>Free Speed</td>
<td>10000 rpm</td>
</tr>
<tr>
<td>Working Torque</td>
<td>20-150 ft.-lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>3/8”</td>
</tr>
<tr>
<td>Length</td>
<td>6”</td>
</tr>
<tr>
<td>Weight</td>
<td>2.89 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4”</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>2.5 cfm</td>
</tr>
</tbody>
</table>

**Ingersoll-Rand Model IR-231C**

**Pistol Impact** - 1/2” Square Drive

Features a friction ring anvil. Double hammer impact mechanism offers long, dependable service.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>1/2”</td>
</tr>
<tr>
<td>Free Speed</td>
<td>8000 rpm</td>
</tr>
<tr>
<td>Working Torque</td>
<td>25-300 ft.-lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>3/8”</td>
</tr>
<tr>
<td>Length</td>
<td>7-1/4”</td>
</tr>
<tr>
<td>Weight</td>
<td>5.8 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4”</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>4.2 cfm</td>
</tr>
</tbody>
</table>

**Chicago Pneumatic Model CP-734H**

**Pistol Impact** - 1/2” Square Drive

Features a friction ring anvil. Dependable, serviceable tool with high torque.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>1/2”</td>
</tr>
<tr>
<td>Free Speed</td>
<td>9000 rpm</td>
</tr>
<tr>
<td>Working Torque</td>
<td>25-310 ft.-lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>3/8”</td>
</tr>
<tr>
<td>Length</td>
<td>7-3/8”</td>
</tr>
<tr>
<td>Weight</td>
<td>5 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4”</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>3.5 cfm</td>
</tr>
</tbody>
</table>

**Chicago Pneumatic Model CP-772H**

**Pistol Impact** - 3/4” Square Drive

Features a friction ring anvil. Heavy-duty impact for fast and reliable impacting on heavy mechanical work.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>3/4”</td>
</tr>
<tr>
<td>Free Speed</td>
<td>5750 rpm</td>
</tr>
<tr>
<td>Working Torque</td>
<td>100-500 ft.-lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>3/8”</td>
</tr>
<tr>
<td>Length</td>
<td>9-5/8”</td>
</tr>
<tr>
<td>Weight</td>
<td>10.5 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4”</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>7.5 cfm</td>
</tr>
</tbody>
</table>

**Ingersoll-Rand Model IR-261**

**Pistol Impact** - 3/4” Square Drive

Features a friction ring anvil. For big jobs that require a compact and powerful 3/4” impact to do the work that 1” tools stumble over. **Model IR-295A 1” pistol impact available.**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>3/4”</td>
</tr>
<tr>
<td>Free Speed</td>
<td>5500 rpm</td>
</tr>
<tr>
<td>Working Torque</td>
<td>200-900 ft.-lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/2”</td>
</tr>
<tr>
<td>Length</td>
<td>8-3/4”</td>
</tr>
<tr>
<td>Weight</td>
<td>12.4 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8”</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>9.5 cfm</td>
</tr>
</tbody>
</table>

See pages 22-25 for impact accessories.
### Industrial Impact Wrenches

**Nippon Pneumatic**

**Model NW-800S**

**Straight Impact** - 3/8" Square Drive

Features a pin-type anvil. Used mostly in repair shops, garages and assembly applications. Features include lightweight, low air consumption and exceptional power. Industrial model.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>8000 rpm</td>
</tr>
<tr>
<td>Torque Range</td>
<td>16-48 ft.-lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>7&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>2.4 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>3.6 cfm</td>
</tr>
</tbody>
</table>

**Model NAW-1200SPTS**

**Straight Impact** - 1/2" Square Drive

Features a pin-type anvil. Single hammer impact wrench is used in repair and garage work shops. Features a built-in power regulator to provide four steps of power control. This wrench is distinguished by its light weight, low air consumption and powerful impacting per blow. Uses brass end plates for longer wear. Industrial model.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>7000 rpm</td>
</tr>
<tr>
<td>Torque Range</td>
<td>80-170 ft.-lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>11&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>4.3 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>3.5 cfm</td>
</tr>
</tbody>
</table>

**Model NW-1200BPTS**

**Pistol Impact** - 1/2" Square Drive

Features a pin-type anvil. This compact, single hammer impact wrench is easily maneuverable for hard to reach places, rugged and lightweight. Features built-in 4-step power regulator standard. Frequently used in repair shops, garages and assembly applications.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>7000 rpm</td>
</tr>
<tr>
<td>Torque Range</td>
<td>55-118 ft.-lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>6-7/8&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>4.0 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>3.5 cfm</td>
</tr>
</tbody>
</table>

**Model NW-1600HARTR**

**Pistol Impact** - 1/2" Square Drive

Features a combination friction ring and through-hole anvil. Lightweight single hammer impact wrench ideal for automotive repair and assembly applications. Features an ergonomic grip, quick reverse lever and built-in 4-step power regulator standard.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>5000 rpm</td>
</tr>
<tr>
<td>Torque Range</td>
<td>74-184 ft.-lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>7-11/16&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>5.5 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>5.3 cfm</td>
</tr>
</tbody>
</table>

**Model NW-2000HAPTS**

**Pistol Impact** - 3/4" Square Drive

Features a pin-type anvil. Heavy-duty single hammer impact wrench ideal for assembly and industrial applications. Features an ergonomic grip, quick reverse lever and built-in 4-step power regulator standard. Dependable, serviceable tool with high torque.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>4500 rpm</td>
</tr>
<tr>
<td>Torque Range</td>
<td>170-405 ft.-lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>9-1/16&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>8.4 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>7.1 cfm</td>
</tr>
</tbody>
</table>

See pages 22-25 for impact accessories.
Michigan Pneumatic  Model MP-181SX-A6
Impact Wrench - 1" Square Drive
Features a combination friction ring and through-hole anvil. Heavy-duty 6" extended shank impact is ideal for use on wheels with recessed rims. Double blow impact mechanism provides high torque output.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>1&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>4000 rpm</td>
</tr>
<tr>
<td>Torque Range</td>
<td>280-1000 ft.-lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>21&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>27 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>12.0 cfm</td>
</tr>
</tbody>
</table>

Michigan Pneumatic  Model MP-612
Pistol Impact - 1" Square Drive
Features a friction ring anvil. Lightweight, compact, heavy-duty impact is recommended for heavy assembly work. Used in fleet, spring and farm equipment shops. Also good for servicing wheel nuts on big trucks.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>1&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>4000 rpm</td>
</tr>
<tr>
<td>Torque Range</td>
<td>280-1000 ft.-lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>10-1/4&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>19.5 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>10.0 cfm</td>
</tr>
</tbody>
</table>

Michigan Pneumatic  Model MP-3200P
Pistol Impact - 1" Square Drive
Features a through-hole anvil. Industrial Model. Short length and perfectly centered dead handle allow easy handling in cramped spaces. Built-in power regulator is standard. Model MP-3200P6 with a 6" extended anvil available. Uses brass end plates for longer wear.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>1&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>4000 rpm</td>
</tr>
<tr>
<td>Torque Range</td>
<td>290-1008 ft.-lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>11-3/8&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>26.2 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>10.6 cfm</td>
</tr>
</tbody>
</table>

Nippon Pneumatic  Model NW-3500P
Pistol Impact - 1" Square Drive
Features a through-hole anvil. Industrial Model. Heavy-duty single hammer design used mainly in garages and repair shops. Built-in power regulator and thumb operated forward-reverse lever.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>1&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>4000 rpm</td>
</tr>
<tr>
<td>Torque Range</td>
<td>472-1032 ft.-lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>11&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>20.2 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>10.6 cfm</td>
</tr>
</tbody>
</table>

Nippon Pneumatic  Model NWH-320P
Pistol Impact - 1" Square Drive
Features a through-hole anvil. Industrial Model. Efficient, heavy-duty clutch impact allows fast rundown and high torque output. Very effective in shipyards, bridge building, construction sites and heavy manufacturing plants.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>1&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>4000 rpm</td>
</tr>
<tr>
<td>Torque Range</td>
<td>280-1327 ft.-lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>10-13/16&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>21.6 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>17.7 cfm</td>
</tr>
</tbody>
</table>

See pages 22-25 for impact accessories.
Industrial Impact Wrenches

Nippon Pneumatic  
Model NW-22AA

Impact Wrench - 3/4" Square Drive

Features a through-hole anvil. Twin hammer mechanism for power and durability. Designed for assembly line work. Features a low vibration handle and four step power regulator.

<table>
<thead>
<tr>
<th>Square Drive</th>
<th>3/4&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Speed</td>
<td>4500 rpm</td>
</tr>
<tr>
<td>Torque Range</td>
<td>398-627 ft.-lbs.</td>
</tr>
<tr>
<td>Rec'd Hose Size</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>15-11/16&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>17.6 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>21.2 cfm</td>
</tr>
</tbody>
</table>

Nippon Pneumatic  
Model NWH-320AU

Impact Wrench - 1" Square Drive

Features a through-hole anvil. Ideal for extra heavy-duty jobs, eliminating the use of hand wrenches. Efficient, heavy duty clutch allows fast rundown and high torque output. Uses brass end plates for longer wear. Model NWH-320A with outside trigger available.

<table>
<thead>
<tr>
<th>Square Drive</th>
<th>1&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Speed</td>
<td>4000 rpm</td>
</tr>
<tr>
<td>Torque Range</td>
<td>1003-1327 ft.-lbs.</td>
</tr>
<tr>
<td>Rec'd Hose Size</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>14-1/2&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>20 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>17.7 cfm</td>
</tr>
</tbody>
</table>

Nippon Pneumatic  
Model NW-32LA

Impact Wrench - 1" Square Drive

Features a through-hole anvil. Straight type impact is ideal for extra heavy-duty jobs. Has terrific power for its weight. Will remove wheel nuts from big trucks and buses with ease. Uses brass end plates for longer wear.

<table>
<thead>
<tr>
<th>Square Drive</th>
<th>1&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Speed</td>
<td>4000 rpm</td>
</tr>
<tr>
<td>Torque Range</td>
<td>487-1032 ft.-lbs.</td>
</tr>
<tr>
<td>Rec'd Hose Size</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>15-11/16&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>23.5 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>30.0 cfm</td>
</tr>
</tbody>
</table>

Nippon Pneumatic  
Model NW-4300GAU

Impact Wrench - 1" Square Drive


<table>
<thead>
<tr>
<th>Square Drive</th>
<th>1&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Speed</td>
<td>4000 rpm</td>
</tr>
<tr>
<td>Torque Range</td>
<td>664-1327 ft.-lbs.</td>
</tr>
<tr>
<td>Rec'd Hose Size</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>17-13/16&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>28.4 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>14.1 cfm</td>
</tr>
</tbody>
</table>

Nippon Pneumatic  
Model NW-5000A

Impact Wrench - 1" Square Drive

Features a through-hole anvil. Single hammer impact offers the ultimate power for those tough jobs. Heavy-duty construction for dependability. Features a built-in four step power regulator.

<table>
<thead>
<tr>
<th>Square Drive</th>
<th>1&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Speed</td>
<td>3000 rpm</td>
</tr>
<tr>
<td>Torque Range</td>
<td>840-1696 ft.-lbs.</td>
</tr>
<tr>
<td>Rec'd Hose Size</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>16-15/16&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>36.3 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>15.9 cfm</td>
</tr>
</tbody>
</table>

See pages 22-25 for impact accessories.
Industrial Impact Wrenches

Michigan Pneumatic  Model MP-3600M
Impact Wrench - 3/4" Square Drive
Features a through-hole anvil. Features a two-hammer impact mechanism for greater power output. Steel clutch housing and brass end plates ensure a long, trouble free life. Built-in power regulator provides power control. Uses brass end plates for longer wear.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>4000 rpm</td>
</tr>
<tr>
<td>Working Torque</td>
<td>604 ft.-lbs.</td>
</tr>
<tr>
<td>Rec'd Hose Size</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>15-1/4&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>17.6 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>9.4 cfm</td>
</tr>
</tbody>
</table>

Michigan Pneumatic  Model MP-3600M6
Impact Wrench - 3/4" Square Drive
Features a through-hole anvil. Reversible impact wrench is lightweight and easy to handle. 6" extended anvil is standard. Designed for studs in recessed quarters. Tremendous tightening and loosening power. Uses brass end plates for longer wear.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>4000 rpm</td>
</tr>
<tr>
<td>Working Torque</td>
<td>575 ft.-lbs.</td>
</tr>
<tr>
<td>Rec'd Hose Size</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>20&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>18 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>9.4 cfm</td>
</tr>
</tbody>
</table>

Michigan Pneumatic  Model MP-3200G
Impact Wrench - 1" Square Drive
Features a through-hole anvil. Straight type impact is ideal for extra heavy-duty jobs. Has terrific power for its weight. Will remove wheel nuts from big trucks and buses with ease. Model MP-3200G6 with a 6" extended anvil available. Uses brass end plates for longer wear.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>1&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>4000 rpm</td>
</tr>
<tr>
<td>Working Torque</td>
<td>900 ft.-lbs.</td>
</tr>
<tr>
<td>Rec'd Hose Size</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>16&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>26.5 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>10.6 cfm</td>
</tr>
</tbody>
</table>

Michigan Pneumatic  Model MP-3650M
Impact Wrench - 1" Square Drive
Features a through-hole anvil. Light, compact impact is recommended for heavy assembly work, managing wheel nuts on big trucks and buses. Will faithfully serve shipbuilders and bridge builders. Uses brass end plates for longer wear.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>1&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>3500 rpm</td>
</tr>
<tr>
<td>Working Torque</td>
<td>1008 ft.-lbs.</td>
</tr>
<tr>
<td>Rec'd Hose Size</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>18&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>29 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>14.1 cfm</td>
</tr>
</tbody>
</table>

Michigan Pneumatic  Model MP-3650M6
Impact Wrench - 1" Square Drive
Features a through-hole anvil. Designed to drive studs in recessed spaces. Has a high power-to-weight ratio and durable construction for long working life. 6" extended anvil is standard. Model MP-3650M6-5SPLN with a spline drive available. Uses brass end plates for longer wear.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>1&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>3500 rpm</td>
</tr>
<tr>
<td>Working Torque</td>
<td>925 ft.-lbs.</td>
</tr>
<tr>
<td>Rec'd Hose Size</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>23&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>30 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>14.1 cfm</td>
</tr>
</tbody>
</table>

See pages 22-25 for impact accessories.


**Industrial Impact Wrenches**

**Michigan Pneumatic**  
*Model MP-6100*  
**Impact Wrench - 1" Square Drive**

Features a through-hole anvil. Ideal for extra heavy-duty jobs, eliminating hand wrenches. Light, compact wrench for heavy assembly work. Efficient, heavy duty clutch allows fast rundown and high torque output. 

- **Model MP-6100-5SPLN** with spline drive or **MP-6100G6** with 6" extended anvil available. Uses brass end plates for longer wear. Parts are interchangeable with CP-610 impact.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>1&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>4000 rpm</td>
</tr>
<tr>
<td>Working Torque</td>
<td>1440 ft.-lbs.</td>
</tr>
<tr>
<td>Rec'd Hose Size</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>14-1/2&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>20 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>17.7 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic**  
*Model MP-6100I*  
**Inside Trigger Impact - 1" Square Drive**

Features a through-hole anvil. Ideal for extra heavy-duty jobs, eliminating the use of hand wrenches. Efficient, heavy duty clutch allows fast rundown and high torque output. 

- **Model MP-6100I-5SPLN** with spline drive or **MP-6100I6** with 6" extended anvil available. Uses brass end plates for longer wear. Parts are interchangeable with CP-610 impact.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>1&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>4000 rpm</td>
</tr>
<tr>
<td>Working Torque</td>
<td>1440 ft.-lbs.</td>
</tr>
<tr>
<td>Rec'd Hose Size</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>14-1/2&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>20 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>17.7 cfm</td>
</tr>
</tbody>
</table>

**Nippon Pneumatic**  
*Model NAW-1200*  
**Right Angle Impact - 1/2" Square Drive**

Features a pin-type anvil. Single hammer impact wrench is used in repair and garage work shops. Features a pin-type anvil and four steps of power control. This wrench is distinguished by its light weight, low air consumption and powerful impacting per blow. 

- Uses brass end plates for longer wear.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>7000 rpm</td>
</tr>
<tr>
<td>Working Torque</td>
<td>120 ft.-lbs.</td>
</tr>
<tr>
<td>Angle Height</td>
<td>3-1/16&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>14-11/32&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>6.6 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>3.5 cfm</td>
</tr>
</tbody>
</table>

**Nippon Pneumatic**  
*Model NAW-19A*  
**Right Angle Impact - 3/4" Square Drive**

Features a through-hole anvil. Right angle impact puts out the right amount of power for fast, effortless nutrunning of 3/4" nuts and bolts. Compact size and easy maneuverability permits nutrunning with minimum clearance. Built-in power regulator. 

- Uses brass end plates for longer wear.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>4000 rpm</td>
</tr>
<tr>
<td>Working Torque</td>
<td>470 ft.-lbs.</td>
</tr>
<tr>
<td>Angle Height</td>
<td>5-13/16&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>16-3/8&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>23.3 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>17.7 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic**  
*Model MP-3650RAN*  
**Right Angle Impact - 1" Square Drive**

Features a through-hole anvil. This 90° angle impact will perform with a gear assembly designed to bear heavy pounding. Used anywhere a straight type won’t reach. Offers the ultimate in power for hard, big, tough nutrunning jobs in hard to reach areas with a minimum of clearance. 

- Uses brass end plates for longer wear.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>1&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>3500 rpm</td>
</tr>
<tr>
<td>Working Torque</td>
<td>925 ft.-lbs.</td>
</tr>
<tr>
<td>Angle Height</td>
<td>7-1/2&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>17-3/8&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>39.6 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>30 cfm</td>
</tr>
</tbody>
</table>

See pages 22-25 for impact accessories.
Heavy-Duty Impact Wrenches

Heavy-Duty Impacts

Features a twin hammer clutch for more power per pound, a pressure fed clutch lubrication system, two piece motor housing for easy maintenance, a built-in muffler for low noise and direct drive for fast run down. **Parts are interchangeable with Ingersoll-Rand 2934, 2940 and 2950 series impact wrenches.**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Shank Size</th>
<th>Handle Type</th>
<th>Torque Range</th>
<th>Length</th>
<th>Weight</th>
<th>Air Inlet Thread*</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-1034EITH</td>
<td>1&quot; Sq. Through-Hole</td>
<td>Inside Trigger</td>
<td>1100-1500 ft.-lbsd.</td>
<td>11-1/4&quot;</td>
<td>19 lbs.</td>
<td>1/2&quot;</td>
<td>47 cfm</td>
</tr>
<tr>
<td>MP-1034EOTH</td>
<td>1&quot; Sq. Through-Hole</td>
<td>Outside Trigger</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP-1034EISS</td>
<td>1&quot; Sq. Through-Hole</td>
<td>#5 Spline</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP-1034EO5S</td>
<td>#5 Spline</td>
<td>Inside Trigger</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP-1040EITH</td>
<td>1&quot; Sq. Through-Hole</td>
<td>Inside Trigger</td>
<td>1600-2000 ft.-lbsd.</td>
<td>12-13/32&quot;</td>
<td>22 lbs.</td>
<td>1/2&quot;</td>
<td>58 cfm</td>
</tr>
<tr>
<td>MP-1040EOTH</td>
<td>1&quot; Sq. Through-Hole</td>
<td>Outside Trigger</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP-1040EISS</td>
<td>1&quot; Sq. Through-Hole</td>
<td>#5 Spline</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP-1040EO5S</td>
<td>#5 Spline</td>
<td>Inside Trigger</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP-1550EITH</td>
<td>1-1/2&quot; Sq. Through-Hole</td>
<td>Inside Trigger</td>
<td>2500-3000 ft.-lbsd.</td>
<td>14-1/2&quot;</td>
<td>33 lbs.</td>
<td>1/2&quot;</td>
<td>70 cfm</td>
</tr>
<tr>
<td>MP-1550EOTH</td>
<td>1-1/2&quot; Sq. Through-Hole</td>
<td>Outside Trigger</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP-1550EISS</td>
<td>1-1/2&quot; Sq. Through-Hole</td>
<td>Inside Trigger</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP-1550EO5S</td>
<td>#5 Spline</td>
<td>Inside Trigger</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Heavy-Duty Impacts

Features a high energy per blow two jaw clutch, rugged steel clutch housing machined from bar stock, bronze alloy end plates for long motor life, a three piece housing for ease of maintenance, high power-to-weight ratio. **Parts are interchangeable with Chicago Pneumatic 611 and 6120 series impact wrenches.**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Shank Size</th>
<th>Handle Type</th>
<th>Torque Range</th>
<th>Length</th>
<th>Weight</th>
<th>Air Inlet Thread*</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-1011EITH</td>
<td>1&quot; Sq. Through-Hole</td>
<td>Inside Trigger</td>
<td>1800-2800 ft.-lbsd.</td>
<td>12-1/2&quot;</td>
<td>22.50 lbs.</td>
<td>1/2&quot;</td>
<td>47 cfm</td>
</tr>
<tr>
<td>MP-1011EOTH</td>
<td>1&quot; Sq. Through-Hole</td>
<td>Outside Trigger</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP-1011EISS</td>
<td>1&quot; Sq. Through-Hole</td>
<td>#5 Spline</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP-1011EO5S</td>
<td>#5 Spline</td>
<td>Inside Trigger</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP-1520EITH</td>
<td>1-1/2&quot; Sq. Through-Hole</td>
<td>Inside Trigger</td>
<td>2500-3500 ft.-lbsd.</td>
<td>14-3/4&quot;</td>
<td>33.75 lbs.</td>
<td>1/2&quot;</td>
<td>70 cfm</td>
</tr>
<tr>
<td>MP-1520EOTH</td>
<td>1-1/2&quot; Sq. Through-Hole</td>
<td>Outside Trigger</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP-1520EISS</td>
<td>#5 Spline</td>
<td>Inside Trigger</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP-1520EO5S</td>
<td>Inside Trigger</td>
<td>Outside Trigger</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Michigan Pneumatic  Model 2920

**Pistol Impact** - 3/4" Square Drive

Features a through-hole anvil. Rugged steel alloy hammer case machined from solid bar. Twin hammer mechanism for high power-to-weight ratio. **Model 2920-1** with a 1" through-hole anvil available. Parts are interchangeable with Ingersoll-Rand Model 2920P1.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>5500 rpm</td>
</tr>
<tr>
<td>Torque Range</td>
<td>800-1100 ft-lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>12-1/2&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>12 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>38 cfm</td>
</tr>
</tbody>
</table>

Michigan Pneumatic  Model MP-7560

**Pistol Impact** - 3/4" Square Drive

Features a through-hole anvil. Powerful two-jaw clutch and steel clutch housing design offers power and dependability. Adjustable power regulator for forward-reverse control built-in. Parts are interchangeable with Chicago Pneumatic Model 6060SASAB. **Model MP-7560-1** with a 1" through-hole anvil available.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Drive</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>3000 rpm</td>
</tr>
<tr>
<td>Torque Range</td>
<td>560-1100 ft-lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>12-1/2&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>12 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>38 cfm</td>
</tr>
</tbody>
</table>

Extra Heavy-Duty Impacts

**Model MP-1578**

Features a through-hole anvil. Designed to produce an exceptionally high torque output. Effective for shipyards, bridge construction, building construction and heavy manufacturing plants. Time tested design for maximum durability. **Model MP-1578** parts are interchangeable with Ingersoll-Rand Models 578A1, 5780A1 and 5980A1. **Model MP-2588** parts are interchangeable with Ingersoll-Rand Model 588.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Shank Size</th>
<th>Torque Range</th>
<th>Length</th>
<th>Weight</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-1578</td>
<td>1-1/2&quot; Sq. Through-Hole</td>
<td>5500-10000 ft-lbs.</td>
<td>23&quot;</td>
<td>86 lbs.</td>
<td>3/4&quot;</td>
<td>3/4&quot;</td>
<td>138 cfm</td>
</tr>
<tr>
<td>MP-2588</td>
<td>2-1/2&quot; Sq. Through-Hole</td>
<td>25000-50000 ft-lbs.</td>
<td>25-3/8&quot;</td>
<td>215 lbs.</td>
<td>1&quot;</td>
<td>1&quot;</td>
<td>155 cfm</td>
</tr>
</tbody>
</table>

See pages 22-25 for impact accessories.
Extra Heavy-Duty Impacts

Nippon Pneumatic  Model NWH-500

Extra Heavy-Duty Impact

Features a through-hole anvil. For extra heavy nutrunning jobs performed by slow and laborious hand wrench methods. Eliminates costly sledging, battering and burning of frozen nuts. Indispensable for production and maintenance jobs in shipyards, steel mills and heavy machinery manufacturing plants. Save manpower by using toolpower. Uses brass end plates for longer wear.

Model NWH-500

Nippon Pneumatic  Model NWH-750-24

Extra Heavy-Duty Impact

Features a through-hole anvil. Designed to produce an exceptionally high torque output. Effective for shipyards, bridge construction, building construction and heavy manufacturing plants. Lightweight aluminum housing allows the operator to manipulate this powerful tool in tight spaces. Uses brass end plates for longer wear.

Model NWH-750-24

Michigan Pneumatic  Model MP-5888

Extra Heavy-Duty Impact

Features a through-hole anvil. Offers the ultimate in power for handling big, tough nutrunning and removal jobs. Used in shipyards, locomotive shops and heavy equipment industrial plants. Save manpower and reduce downtime by using tool power.

Model MP-5888

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Shank Size</th>
<th>Free Speed</th>
<th>Torque Range</th>
<th>Length</th>
<th>Weight</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>NWH-500</td>
<td>1-1/2” Sq.</td>
<td>3500 rpm</td>
<td>1800-4425 ft.-lbs.</td>
<td>22-3/16”</td>
<td>63.8 lbs.</td>
<td>3/4”</td>
<td>1”</td>
<td>43 cfm</td>
</tr>
<tr>
<td>NWH-750-24</td>
<td>2-1/2” Sq.</td>
<td>2200 rpm</td>
<td>10000-15000 ft.-lbs.</td>
<td>25-7/16”</td>
<td>115.7 lbs.</td>
<td>3/4”</td>
<td>1”</td>
<td>53 cfm</td>
</tr>
<tr>
<td>MP-5888</td>
<td>2-1/2” Sq.</td>
<td>2600 rpm</td>
<td>7200-25000 ft.-lbs.</td>
<td>24-1/2”</td>
<td>167 lbs.</td>
<td>1”</td>
<td></td>
<td>85 cfm</td>
</tr>
</tbody>
</table>
Pulsus Tools

Nippon Pneumatic

**Pistol Pulsus Wrench**

- Ergonomic Grip
- Reduced Trigger Pull
- Unique Oil Bypass Port
- Single Blow per Revolution
- Significant Oil Life Extension

The N-DuraPulse Series' unique single bypass inertia pulse mechanism delivers adjustable, yet stable, tightening torque while extending the oil life and decreasing the downtime for routine maintenance.

The ergonomic grip and reduced trigger pull also make this series more comfortable and less taxing for the operator.

**Pulsus Wrench Specifications**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Shank Size</th>
<th>Retainer Type</th>
<th>Free Speed</th>
<th>Torque Range</th>
<th>Length</th>
<th>Weight</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPP-06PTS</td>
<td>3/8&quot; Sq.</td>
<td>Pin-Type</td>
<td>6500 rpm</td>
<td>16-27 ft.-lbs.</td>
<td>6&quot;</td>
<td>1.87 lbs.</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>10.6 cfm</td>
</tr>
<tr>
<td>NPP-08PTS</td>
<td>3/8&quot; Sq.</td>
<td>Pin-Type</td>
<td>6500 rpm</td>
<td>26-37 ft.-lbs.</td>
<td>6&quot;</td>
<td>1.96 lbs.</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>10.6 cfm</td>
</tr>
</tbody>
</table>

**Automatic Shut-Off Pulsus Wrench**

**Automatic Shut-Off Pulsus Wrench Specifications**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Shank Size</th>
<th>Retainer Type</th>
<th>Free Speed</th>
<th>Torque Range (soft joint)</th>
<th>Length</th>
<th>Weight</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPR-05PTS</td>
<td>3/8&quot; Sq.</td>
<td>Pin-Type</td>
<td>6000 rpm</td>
<td>5-8 ft.-lbs.</td>
<td>6-1/2&quot;</td>
<td>2.2 lbs</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>12.4 cfm</td>
</tr>
<tr>
<td>NPR-06PTS</td>
<td>3/8&quot; Sq.</td>
<td>Pin-Type</td>
<td>6000 rpm</td>
<td>7-15 ft.-lbs.</td>
<td>6-3/4&quot;</td>
<td>2.4 lbs</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>12.4 cfm</td>
</tr>
<tr>
<td>NPR-07PTS</td>
<td>3/8&quot; Sq.</td>
<td>Pin-Type</td>
<td>5800 rpm</td>
<td>14-22 ft.-lbs.</td>
<td>6-3/4&quot;</td>
<td>2.4 lbs</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>12.4 cfm</td>
</tr>
<tr>
<td>NPR-09PTS</td>
<td>1/2&quot; Sq.</td>
<td>Pin-Type</td>
<td>5800 rpm</td>
<td>22-36 ft.-lbs.</td>
<td>7&quot;</td>
<td>3.1 lbs</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>15.9 cfm</td>
</tr>
<tr>
<td>NPR-10PTS</td>
<td>1/2&quot; Sq.</td>
<td>Pin-Type</td>
<td>5500 rpm</td>
<td>36-59 ft.-lbs.</td>
<td>7-11/16&quot;</td>
<td>3.7 lbs</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>17.7 cfm</td>
</tr>
<tr>
<td>NPR-12PTS</td>
<td>1/2&quot; Sq.</td>
<td>Pin-Type</td>
<td>5300 rpm</td>
<td>59-80 ft.-lbs.</td>
<td>7-11/16&quot;</td>
<td>4.4 lbs</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>19.4 cfm</td>
</tr>
</tbody>
</table>

See pages 22-25 for impact accessories.
Pulsus Tools

Nippon Pneumatic

**Pistol Pulsus Wrench & Screwdriver**

NPK’s “Pulsus” oil pulse mechanism tools feature a dual chambered air motor, which needs no lubrication and provides low vibration, low noise, and high durability. These lightweight, compact tools offer high performance and highly accurate tightening torque with easy torque adjustment. Other features include an ergonomic grip and a quick reverse that can be moved from the left side of the tool to the right side for left handed operation.

### NPK Screwdriver Specifications

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Shank Size</th>
<th>Free Speed</th>
<th>Torque Range</th>
<th>Length</th>
<th>Weight</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPW-450A-DX0</td>
<td>1/4” Hex</td>
<td>6500 rpm</td>
<td>18-23 ft.-lbs.</td>
<td>6-3/16”</td>
<td>2.0 lbs.</td>
<td>3/8”</td>
<td>1/4”</td>
<td>10.6 cfm</td>
</tr>
<tr>
<td>NPW-550A-DX0</td>
<td>1/4” Hex</td>
<td>6500 rpm</td>
<td>20-29 ft.-lbs.</td>
<td>6-5/16”</td>
<td>2.2 lbs.</td>
<td>3/8”</td>
<td>1/4”</td>
<td>12.4 cfm</td>
</tr>
</tbody>
</table>

NPW-450A-DX0
1/4" Female Hex
Pulsus Screwdriver

NPW-550A-DX0
1/4" Female Hex
Pulsus Screwdriver

NPW-650APTS-000
3/8" Sq. Drive
Pulsus Wrench

NPW-1600APTS-000
3/4" Sq. Drive
Pulsus Wrench

See pages 22-25 for impact accessories. See pages 24-25 for screwdriver accessories.
NPK’s “Pulsus” oil pulse mechanism tools feature a dual chambered air motor, which needs no lubrication and provides low vibration, low noise, and high durability. These lightweight, compact tools offer high performance and highly accurate tightening torque with easy torque adjustment. Other features include an ergonomic grip and a quick reverse that can be moved from the left side of the tool to the right side for left handed operation.

### Automatic Shut-Off Pulsus Wrench & Screwdriver

**NPW-450A-TDX**
1/4” Female Hex Pulsus Screwdriver

**NPW-550APTS-T00**
3/8” Sq. Drive Pulsus Wrench

**NPW-800BPTS-T00**
3/8” Sq. Drive Pulsus Wrench

### Automatic Shut-Off Pulsus Wrench Specifications

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Shank Size</th>
<th>Retainer Type</th>
<th>Free Speed</th>
<th>Torque Range</th>
<th>Length</th>
<th>Weight</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPW-450APTS-T00</td>
<td>3/8” Sq.</td>
<td>Pin-Type</td>
<td>6000 rpm</td>
<td>15-21 ft.-lbs.</td>
<td>7-1/2”</td>
<td>2.9 lbs.</td>
<td>1/4”</td>
<td>1/4”</td>
<td>12 cfm</td>
</tr>
<tr>
<td>NPW-550APTS-T00</td>
<td>3/8” Sq.</td>
<td>Pin-Type</td>
<td>6000 rpm</td>
<td>19-29 ft.-lbs.</td>
<td>7-1/2”</td>
<td>2.9 lbs.</td>
<td>1/4”</td>
<td>1/4”</td>
<td>12 cfm</td>
</tr>
<tr>
<td>NPW-650APTS-T00</td>
<td>3/8” Sq.</td>
<td>Pin-Type</td>
<td>5800 rpm</td>
<td>29-40 ft.-lbs.</td>
<td>8-1/8”</td>
<td>3.3 lbs.</td>
<td>3/8”</td>
<td>3/8”</td>
<td>16 cfm</td>
</tr>
<tr>
<td>NPW-800BPTS-T00</td>
<td>3/8” Sq.</td>
<td>Pin-Type</td>
<td>5500 rpm</td>
<td>42-55 ft.-lbs.</td>
<td>8-3/8”</td>
<td>3.7 lbs.</td>
<td>3/8”</td>
<td>3/8”</td>
<td>18 cfm</td>
</tr>
</tbody>
</table>

### Automatic Shut-Off Pulsus Screwdriver Specifications

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Shank Size</th>
<th>Free Speed</th>
<th>Torque Range</th>
<th>Length</th>
<th>Weight</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPW-450A-TDX</td>
<td>1/4” Hex</td>
<td>6000 rpm</td>
<td>15-20 ft.-lbs.</td>
<td>7-3/4”</td>
<td>2.9 lbs.</td>
<td>1/4”</td>
<td>1/4”</td>
<td>12 cfm</td>
</tr>
<tr>
<td>NPW-550A-TDX</td>
<td>1/4” Hex</td>
<td>19-24 ft.-lbs.</td>
<td>7-3/4”</td>
<td>3.0 lbs.</td>
<td>3/8”</td>
<td>3/8”</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Pulsus & Hydrotension Tools

#### Straight Pulsus Wrench & Screwdriver

**NPW-450EAPTS-000**
3/8” Sq. Drive Straight Pulsus Wrench

**NPW-450EA-DX0**
1/4” Female Hex Straight Pulsus Screwdriver

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Shank Size</th>
<th>Retainer Type</th>
<th>Free Speed</th>
<th>Torque Range</th>
<th>Length</th>
<th>Weight</th>
<th>Rec'd Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPW-450EAPTS-000</td>
<td>3/8” Sq.</td>
<td>Pin-Type</td>
<td>6000 rpm</td>
<td>14-20 ft.-lbs.</td>
<td>9-17/32”</td>
<td>1.9 lbs.</td>
<td>1/4”</td>
<td>1/4”</td>
<td>8.1 cfm</td>
</tr>
<tr>
<td>NPW-450EA-DX0</td>
<td>1/4” Hex</td>
<td>-</td>
<td>6000 rpm</td>
<td>14-20 ft.-lbs.</td>
<td>9-19/32”</td>
<td>1.3 lbs.</td>
<td>1/4”</td>
<td>1/4”</td>
<td>8.1 cfm</td>
</tr>
</tbody>
</table>

#### Straight Hydrotension Pulse Wrench

**NPW-60SPTS**
3/8” Sq. Drive Straight Pulse Wrench

**NPW-80SPTS**
3/8” Sq. Drive Straight Pulse Wrench

**NPW-100SPTS**
1/2” Sq. Drive Straight Pulse Wrench

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Shank Size</th>
<th>Retainer Type</th>
<th>Free Speed</th>
<th>Torque Range</th>
<th>Length</th>
<th>Weight</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPW-50SPTS</td>
<td>3/8” Sq.</td>
<td>Pin-Type</td>
<td>9000 rpm</td>
<td>13-20 ft.-lbs.</td>
<td>8-1/8”</td>
<td>2.2 lbs.</td>
<td>1/4”</td>
<td>1/4”</td>
<td>7.1 cfm</td>
</tr>
<tr>
<td>NPW-60SPTS</td>
<td>3/8” Sq.</td>
<td>Pin-Type</td>
<td>10500 rpm</td>
<td>15-28 ft.-lbs.</td>
<td>7-27/32”</td>
<td>2.3 lbs.</td>
<td>1/4”</td>
<td>1/4”</td>
<td>7.1 cfm</td>
</tr>
<tr>
<td>NPW-80SPTS</td>
<td>3/8” Sq.</td>
<td>Pin-Type</td>
<td>9000 rpm</td>
<td>19-35 ft.-lbs.</td>
<td>8-11/32”</td>
<td>2.9 lbs.</td>
<td>1/4”</td>
<td>1/4”</td>
<td>8.8 cfm</td>
</tr>
<tr>
<td>NPW-100SPTS</td>
<td>1/2” Sq.</td>
<td>Pin-Type</td>
<td>7500 rpm</td>
<td>30-58 ft.-lbs.</td>
<td>11-9/16”</td>
<td>4.4 lbs.</td>
<td>1/4”</td>
<td>1/4”</td>
<td>10.6 cfm</td>
</tr>
</tbody>
</table>

#### Pistol Hydrotension Pulse Wrench

**NPW-60PTS**
3/8” Sq. Drive Pulse Wrench

**NPW-140PTS**
1/2” Sq. Drive Pulse Wrench

**NPW-180PTS**
3/4” Sq. Drive Pulse Wrench

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Shank Size</th>
<th>Retainer Type</th>
<th>Free Speed</th>
<th>Torque Range</th>
<th>Length</th>
<th>Weight</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPW-50PTS</td>
<td>3/8” Sq.</td>
<td>Pin-Type</td>
<td>9000 rpm</td>
<td>6-25/32”</td>
<td>2.3 lbs.</td>
<td>1/4”</td>
<td>1/4”</td>
<td>9.6 cfm</td>
<td></td>
</tr>
<tr>
<td>NPW-60PTS</td>
<td>3/8” Sq.</td>
<td>Pin-Type</td>
<td>10500 rpm</td>
<td>25-32”</td>
<td>2.9 lbs.</td>
<td>1/4”</td>
<td>1/4”</td>
<td>9.6 cfm</td>
<td></td>
</tr>
<tr>
<td>NPW-80PTS</td>
<td>3/8” Sq.</td>
<td>Pin-Type</td>
<td>9000 rpm</td>
<td>11-13/32”</td>
<td>3.2 lbs.</td>
<td>1/4”</td>
<td>1/4”</td>
<td>9.6 cfm</td>
<td></td>
</tr>
<tr>
<td>NPW-100PTS</td>
<td>1/2” Sq.</td>
<td>Pin-Type</td>
<td>7500 rpm</td>
<td>7-1/4”</td>
<td>4.6 lbs.</td>
<td>3/8”</td>
<td>1/4”</td>
<td>9.6 cfm</td>
<td></td>
</tr>
<tr>
<td>NPW-120PTS</td>
<td>1/2” Sq.</td>
<td>Pin-Type</td>
<td>6000 rpm</td>
<td>7-5/8”</td>
<td>5.3 lbs.</td>
<td>3/8”</td>
<td>1/4”</td>
<td>9.6 cfm</td>
<td></td>
</tr>
<tr>
<td>NPW-140PTS</td>
<td>1/2” Sq.</td>
<td>Pin-Type</td>
<td>5200 rpm</td>
<td>8-11/32”</td>
<td>6.4 lbs.</td>
<td>3/8”</td>
<td>1/4”</td>
<td>9.6 cfm</td>
<td></td>
</tr>
<tr>
<td>NPW-160PTS</td>
<td>1/2” Sq.</td>
<td>Pin-Type</td>
<td>4500 rpm</td>
<td>8-21/32”</td>
<td>7.5 lbs.</td>
<td>3/8”</td>
<td>1/4”</td>
<td>9.6 cfm</td>
<td></td>
</tr>
<tr>
<td>NPW-180PTS</td>
<td>3/4” Sq.</td>
<td>Pin-Type</td>
<td>4000 rpm</td>
<td>121-173 ft.-lbs.</td>
<td>8.4 lbs.</td>
<td>3/8”</td>
<td>1/4”</td>
<td>9.6 cfm</td>
<td></td>
</tr>
</tbody>
</table>

See pages 22-25 for impact accessories. See pages 24-25 for screwdriver accessories.
**Hydrotension Tools & Torque Controlled Impacts**

**Automatic Shut-Off Hydrotension Pulse Wrench**

**Nippon Pneumatic**

**Model TM-2000A Torque Meter**

Useful for torque adjustment and control of hydrotension wrenches, calibrating torque wrenches and checking the torque of nutrunners. Features a digital display, high measurement accuracy, and a peak holding circuit for easy reading of displayed values. **Includes one 3/8" square socket adapter, one 1/2" square socket adapter and connecting cable.**

- **Measuring Range**: 0–199.9 Nm
- **Power Supply**: AC 100/110V
- **Amplifier Weight**: 3.5 lbs.
- **Sensor Weight**: 14.3 lbs.
- **Dimensions**: 11" x 7-1/2" x 3-1/2"

**Michigan Pneumatic**

**Model MP-6100TA Torque Impact - 1" Square Drive**

Features a through-hole anvil. Torque controlled impact provides easy torque adjustment and uniform torque output. "Auto-Stop" feature tightens bolts to pre-specified tension. When preset torque is reached, tool stops automatically. **Some MP-6100TA-5SPLN parts are interchangeable with the CP-610T impact.**

- **Square Drive**: 1"
- **Free Speed**: 4000 rpm
- **Torque Range**: 300-1400 ft.-lbs.
- **Rec’d Hose Size**: 1/2"
- **Length**: 16-1/16"
- **Weight**: 23.5 lbs.
- **Air Inlet Thread**: 1/2"
- **Avg. Air Consumption**: 17.7 cfm

**Michigan Pneumatic**

**Model MP-6100TA-5SPLN Torque Impact - #5 Spline Drive**

Features a pin-type anvil. Torque controlled impact provides easy torque adjustment and uniform torque output. “Auto-Stop” feature tightens bolts to pre-specified tension. When preset torque is reached, tool stops automatically. **Some MP-6100TA-5SPLN parts are interchangeable with the CP-610T impact.**

- **Spline Drive**: #5
- **Free Speed**: 4000 rpm
- **Torque Range**: 300-1400 ft.-lbs.
- **Rec’d Hose Size**: 1/2"
- **Length**: 17-1/16"
- **Weight**: 23.7 lbs.
- **Air Inlet Thread**: 1/2"
- **Avg. Air Consumption**: 17.7 cfm

See pages 22-25 for impact accessories.
### Heavy-Duty Industrial Impact Sockets

#### 3/8" Sq. Drive - 6 Point Hex

<table>
<thead>
<tr>
<th>Size</th>
<th>Standard</th>
<th>Deep</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/16&quot;</td>
<td>3810</td>
<td>3910</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>3812</td>
<td>3912</td>
</tr>
<tr>
<td>7/16&quot;</td>
<td>3814</td>
<td>3914</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>3816</td>
<td>3916</td>
</tr>
<tr>
<td>9/16&quot;</td>
<td>3818</td>
<td>3918</td>
</tr>
<tr>
<td>5/8&quot;</td>
<td>3820</td>
<td>3920</td>
</tr>
<tr>
<td>11/16&quot;</td>
<td>3822</td>
<td>3922</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>3824</td>
<td>3924</td>
</tr>
</tbody>
</table>

#### 1/2" Sq. Drive - 6 Point Hex, Metric

<table>
<thead>
<tr>
<th>Size</th>
<th>Standard</th>
<th>Deep</th>
</tr>
</thead>
<tbody>
<tr>
<td>10mm</td>
<td>48-10mm</td>
<td>49-10mm</td>
</tr>
<tr>
<td>11mm</td>
<td>48-11mm</td>
<td>49-11mm</td>
</tr>
<tr>
<td>12mm</td>
<td>48-12mm</td>
<td>49-12mm</td>
</tr>
<tr>
<td>13mm</td>
<td>48-13mm</td>
<td>49-13mm</td>
</tr>
<tr>
<td>14mm</td>
<td>48-14mm</td>
<td>49-14mm</td>
</tr>
<tr>
<td>15mm</td>
<td>48-15mm</td>
<td>49-15mm</td>
</tr>
<tr>
<td>16mm</td>
<td>48-16mm</td>
<td>49-16mm</td>
</tr>
<tr>
<td>17mm</td>
<td>48-17mm</td>
<td>49-17mm</td>
</tr>
<tr>
<td>18mm</td>
<td>48-18mm</td>
<td>49-18mm</td>
</tr>
<tr>
<td>19mm</td>
<td>48-19mm</td>
<td>49-19mm</td>
</tr>
<tr>
<td>20mm</td>
<td>48-20mm</td>
<td>49-20mm</td>
</tr>
<tr>
<td>21mm</td>
<td>48-21mm</td>
<td>49-21mm</td>
</tr>
<tr>
<td>22mm</td>
<td>48-22mm</td>
<td>49-22mm</td>
</tr>
<tr>
<td>23mm</td>
<td>48-23mm</td>
<td>49-23mm</td>
</tr>
<tr>
<td>24mm</td>
<td>48-24mm</td>
<td>49-24mm</td>
</tr>
<tr>
<td>25mm</td>
<td>48-25mm</td>
<td>-</td>
</tr>
<tr>
<td>26mm</td>
<td>48-26mm</td>
<td>-</td>
</tr>
<tr>
<td>27mm</td>
<td>48-27mm</td>
<td>49-27mm</td>
</tr>
<tr>
<td>28mm</td>
<td>48-28mm</td>
<td>-</td>
</tr>
<tr>
<td>29mm</td>
<td>-</td>
<td>49-29mm</td>
</tr>
<tr>
<td>30mm</td>
<td>48-30mm</td>
<td>49-30mm</td>
</tr>
<tr>
<td>32mm</td>
<td>48-32mm</td>
<td>49-32mm</td>
</tr>
<tr>
<td>34mm</td>
<td>-</td>
<td>49-34mm</td>
</tr>
<tr>
<td>35mm</td>
<td>-</td>
<td>49-35mm</td>
</tr>
<tr>
<td>36mm</td>
<td>48-36mm</td>
<td>49-36mm</td>
</tr>
</tbody>
</table>

#### 3/8" Sq. Drive - 6 Point, Metric

<table>
<thead>
<tr>
<th>Size</th>
<th>Standard</th>
<th>Deep</th>
</tr>
</thead>
<tbody>
<tr>
<td>6mm</td>
<td>38-06mm</td>
<td>39-06mm</td>
</tr>
<tr>
<td>7mm</td>
<td>38-07mm</td>
<td>39-07mm</td>
</tr>
<tr>
<td>8mm</td>
<td>38-08mm</td>
<td>39-08mm</td>
</tr>
<tr>
<td>9mm</td>
<td>38-09mm</td>
<td>39-09mm</td>
</tr>
<tr>
<td>10mm</td>
<td>38-10mm</td>
<td>39-10mm</td>
</tr>
<tr>
<td>11mm</td>
<td>38-11mm</td>
<td>39-11mm</td>
</tr>
<tr>
<td>12mm</td>
<td>38-12mm</td>
<td>39-12mm</td>
</tr>
<tr>
<td>13mm</td>
<td>38-13mm</td>
<td>39-13mm</td>
</tr>
<tr>
<td>14mm</td>
<td>38-14mm</td>
<td>39-14mm</td>
</tr>
<tr>
<td>15mm</td>
<td>38-15mm</td>
<td>39-15mm</td>
</tr>
<tr>
<td>16mm</td>
<td>38-16mm</td>
<td>39-16mm</td>
</tr>
<tr>
<td>17mm</td>
<td>38-17mm</td>
<td>39-17mm</td>
</tr>
<tr>
<td>18mm</td>
<td>38-18mm</td>
<td>39-18mm</td>
</tr>
<tr>
<td>19mm</td>
<td>38-19mm</td>
<td>39-19mm</td>
</tr>
</tbody>
</table>

#### 1" Sq. Drive - 6 Point Hex

<table>
<thead>
<tr>
<th>Size</th>
<th>Standard</th>
<th>Deep</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4&quot;</td>
<td>8824</td>
<td>8924</td>
</tr>
<tr>
<td>13/16&quot;</td>
<td>8826</td>
<td>8926</td>
</tr>
<tr>
<td>7/8&quot;</td>
<td>8828</td>
<td>8928</td>
</tr>
<tr>
<td>15/16&quot;</td>
<td>8830</td>
<td>8930</td>
</tr>
<tr>
<td>1&quot;</td>
<td>8832</td>
<td>8932</td>
</tr>
<tr>
<td>1-1/16&quot;</td>
<td>8833</td>
<td>8933</td>
</tr>
<tr>
<td>1-1/8&quot;</td>
<td>8836</td>
<td>8936</td>
</tr>
<tr>
<td>1-3/16&quot;</td>
<td>8838</td>
<td>8938</td>
</tr>
<tr>
<td>1-1/4&quot;</td>
<td>8840</td>
<td>8939</td>
</tr>
<tr>
<td>1-5/16&quot;</td>
<td>8842</td>
<td>8942</td>
</tr>
<tr>
<td>1-3/8&quot;</td>
<td>8844</td>
<td>8944</td>
</tr>
<tr>
<td>1-7/16&quot;</td>
<td>8846</td>
<td>8946</td>
</tr>
<tr>
<td>1-1/2&quot;</td>
<td>8848</td>
<td>8948</td>
</tr>
<tr>
<td>1-9/16&quot;</td>
<td>8850</td>
<td>8950</td>
</tr>
<tr>
<td>1-5/8&quot;</td>
<td>8852</td>
<td>8952</td>
</tr>
<tr>
<td>1-11/16&quot;</td>
<td>8854</td>
<td>8954</td>
</tr>
<tr>
<td>1-3/4&quot;</td>
<td>8856</td>
<td>8956</td>
</tr>
<tr>
<td>1-13/16&quot;</td>
<td>8858</td>
<td>8958</td>
</tr>
<tr>
<td>1-7/8&quot;</td>
<td>8860</td>
<td>8960</td>
</tr>
<tr>
<td>1-15/16&quot;</td>
<td>8862</td>
<td>8962</td>
</tr>
</tbody>
</table>

#### 3/4" Sq. Drive - 6 Point Hex

<table>
<thead>
<tr>
<th>Size</th>
<th>Standard</th>
<th>Deep</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/16&quot;</td>
<td>6818</td>
<td>6918</td>
</tr>
<tr>
<td>5/8&quot;</td>
<td>6820</td>
<td>6920</td>
</tr>
<tr>
<td>11/16&quot;</td>
<td>6822</td>
<td>6922</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>6824</td>
<td>6924</td>
</tr>
<tr>
<td>13/16&quot;</td>
<td>6826</td>
<td>6926</td>
</tr>
<tr>
<td>7/8&quot;</td>
<td>6828</td>
<td>6928</td>
</tr>
<tr>
<td>15/16&quot;</td>
<td>6830</td>
<td>6930</td>
</tr>
<tr>
<td>1&quot;</td>
<td>6832</td>
<td>6932</td>
</tr>
<tr>
<td>1-1/16&quot;</td>
<td>6833</td>
<td>6933</td>
</tr>
<tr>
<td>1-1/8&quot;</td>
<td>6836</td>
<td>6936</td>
</tr>
<tr>
<td>1-1/4&quot;</td>
<td>6838</td>
<td>6938</td>
</tr>
<tr>
<td>1-5/16&quot;</td>
<td>6840</td>
<td>6940</td>
</tr>
<tr>
<td>1-3/8&quot;</td>
<td>6842</td>
<td>6942</td>
</tr>
<tr>
<td>1-7/16&quot;</td>
<td>6844</td>
<td>6944</td>
</tr>
<tr>
<td>1-1/2&quot;</td>
<td>6846</td>
<td>6946</td>
</tr>
<tr>
<td>1-9/16&quot;</td>
<td>6848</td>
<td>6948</td>
</tr>
<tr>
<td>1-5/8&quot;</td>
<td>6850</td>
<td>6950</td>
</tr>
<tr>
<td>1-11/16&quot;</td>
<td>6852</td>
<td>6952</td>
</tr>
<tr>
<td>1-3/4&quot;</td>
<td>6854</td>
<td>6954</td>
</tr>
<tr>
<td>1-13/16&quot;</td>
<td>6856</td>
<td>6956</td>
</tr>
<tr>
<td>1-7/8&quot;</td>
<td>6858</td>
<td>6958</td>
</tr>
<tr>
<td>1-15/16&quot;</td>
<td>6860</td>
<td>6960</td>
</tr>
<tr>
<td>2&quot;</td>
<td>6862</td>
<td>6962</td>
</tr>
</tbody>
</table>

#### 1/2" Sq. Drive - 6 Point Hex

<table>
<thead>
<tr>
<th>Size</th>
<th>Standard</th>
<th>Deep</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8&quot;</td>
<td>4812</td>
<td>4912</td>
</tr>
<tr>
<td>7/16&quot;</td>
<td>4814</td>
<td>4914</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>4816</td>
<td>4916</td>
</tr>
<tr>
<td>9/16&quot;</td>
<td>4818</td>
<td>4918</td>
</tr>
<tr>
<td>5/8&quot;</td>
<td>4820</td>
<td>4920</td>
</tr>
<tr>
<td>11/16&quot;</td>
<td>4822</td>
<td>4922</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>4824</td>
<td>4924</td>
</tr>
<tr>
<td>13/16&quot;</td>
<td>4826</td>
<td>4926</td>
</tr>
<tr>
<td>7/8&quot;</td>
<td>4828</td>
<td>4928</td>
</tr>
<tr>
<td>15/16&quot;</td>
<td>4830</td>
<td>4930</td>
</tr>
<tr>
<td>1&quot;</td>
<td>4832</td>
<td>4932</td>
</tr>
<tr>
<td>1-1/16&quot;</td>
<td>4834</td>
<td>4934</td>
</tr>
<tr>
<td>1-1/8&quot;</td>
<td>4836</td>
<td>4936</td>
</tr>
<tr>
<td>1-3/16&quot;</td>
<td>4838</td>
<td>4938</td>
</tr>
<tr>
<td>1-1/4&quot;</td>
<td>4840</td>
<td>4940</td>
</tr>
<tr>
<td>1-5/16&quot;</td>
<td>4842</td>
<td>4942</td>
</tr>
<tr>
<td>1-3/8&quot;</td>
<td>4844</td>
<td>4944</td>
</tr>
<tr>
<td>1-7/16&quot;</td>
<td>4846</td>
<td>4946</td>
</tr>
<tr>
<td>1-1/2&quot;</td>
<td>4848</td>
<td>4948</td>
</tr>
</tbody>
</table>

Deep length, 12 point, metric and other sockets also available.
#5 Spline Drive - 6 Point Hex

<table>
<thead>
<tr>
<th>Female Dr.</th>
<th>Male Sq. Dr.</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/8&quot;</td>
<td>5828</td>
<td></td>
</tr>
<tr>
<td>15/16&quot;</td>
<td>5830</td>
<td></td>
</tr>
<tr>
<td>1&quot;</td>
<td>5832</td>
<td></td>
</tr>
<tr>
<td>1-1/16&quot;</td>
<td>5834</td>
<td>5934</td>
</tr>
<tr>
<td>1-1/8&quot;</td>
<td>5836</td>
<td>5936</td>
</tr>
<tr>
<td>1-3/16&quot;</td>
<td>5838</td>
<td>5938</td>
</tr>
<tr>
<td>1-1/4&quot;</td>
<td>5840</td>
<td>5940</td>
</tr>
<tr>
<td>1-5/16&quot;</td>
<td>5842</td>
<td>5942</td>
</tr>
<tr>
<td>1-3/8&quot;</td>
<td>5844</td>
<td></td>
</tr>
<tr>
<td>1-7/16&quot;</td>
<td>5846</td>
<td>5946</td>
</tr>
<tr>
<td>1-1/2&quot;</td>
<td>5848</td>
<td>5948</td>
</tr>
<tr>
<td>1-5/8&quot;</td>
<td>5852</td>
<td></td>
</tr>
<tr>
<td>1-3/4&quot;</td>
<td>5856</td>
<td></td>
</tr>
<tr>
<td>1-13/16&quot;</td>
<td>5858</td>
<td></td>
</tr>
<tr>
<td>1-7/8&quot;</td>
<td>5860</td>
<td></td>
</tr>
<tr>
<td>2&quot;</td>
<td>5864</td>
<td></td>
</tr>
</tbody>
</table>

2-1/2" Sq. Drive - 6 Point Hex

<table>
<thead>
<tr>
<th>Size</th>
<th>Standard</th>
<th>Deep</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3/4&quot;</td>
<td>85814</td>
<td></td>
</tr>
<tr>
<td>1-7/8&quot;</td>
<td>85815</td>
<td></td>
</tr>
<tr>
<td>2&quot;</td>
<td>85816</td>
<td></td>
</tr>
<tr>
<td>2-1/8&quot;</td>
<td>85817</td>
<td></td>
</tr>
<tr>
<td>2-1/4&quot;</td>
<td>85818</td>
<td></td>
</tr>
<tr>
<td>2-3/8&quot;</td>
<td>85819</td>
<td></td>
</tr>
<tr>
<td>2-9/16&quot;</td>
<td>85820A</td>
<td></td>
</tr>
<tr>
<td>2-5/8&quot;</td>
<td>85821</td>
<td></td>
</tr>
<tr>
<td>2-3/4&quot;</td>
<td>85822</td>
<td></td>
</tr>
<tr>
<td>2-15/16&quot;</td>
<td>85823</td>
<td></td>
</tr>
<tr>
<td>3&quot;</td>
<td>85824</td>
<td></td>
</tr>
<tr>
<td>3-1/8&quot;</td>
<td>85825</td>
<td></td>
</tr>
<tr>
<td>3-1/4&quot;</td>
<td>85826</td>
<td></td>
</tr>
<tr>
<td>3-3/8&quot;</td>
<td>85827</td>
<td></td>
</tr>
<tr>
<td>3-1/2&quot;</td>
<td>85828</td>
<td></td>
</tr>
<tr>
<td>3-5/8&quot;</td>
<td>85829</td>
<td></td>
</tr>
<tr>
<td>3-3/4&quot;</td>
<td>85830</td>
<td></td>
</tr>
<tr>
<td>3-7/8&quot;</td>
<td>85831</td>
<td></td>
</tr>
<tr>
<td>4&quot;</td>
<td>85832</td>
<td></td>
</tr>
<tr>
<td>4-1/8&quot;</td>
<td>85833</td>
<td></td>
</tr>
<tr>
<td>4-1/4&quot;</td>
<td>85834</td>
<td></td>
</tr>
<tr>
<td>4-3/8&quot;</td>
<td>85835</td>
<td></td>
</tr>
<tr>
<td>4-1/2&quot;</td>
<td>85836</td>
<td></td>
</tr>
<tr>
<td>4-5/8&quot;</td>
<td>85837</td>
<td></td>
</tr>
<tr>
<td>4-3/4&quot;</td>
<td>85838</td>
<td></td>
</tr>
<tr>
<td>4-7/8&quot;</td>
<td>85839</td>
<td></td>
</tr>
<tr>
<td>5&quot;</td>
<td>85840</td>
<td></td>
</tr>
<tr>
<td>5-1/8&quot;</td>
<td>85841</td>
<td></td>
</tr>
<tr>
<td>5-1/4&quot;</td>
<td>85842</td>
<td></td>
</tr>
<tr>
<td>5-3/8&quot;</td>
<td>85843</td>
<td></td>
</tr>
<tr>
<td>5-1/2&quot;</td>
<td>85844</td>
<td></td>
</tr>
<tr>
<td>5-5/8&quot;</td>
<td>85845</td>
<td></td>
</tr>
<tr>
<td>5-3/4&quot;</td>
<td>85846</td>
<td></td>
</tr>
<tr>
<td>6-1/8&quot;</td>
<td>85849</td>
<td></td>
</tr>
<tr>
<td>6-1/2&quot;</td>
<td>85852</td>
<td></td>
</tr>
<tr>
<td>6-3/8&quot;</td>
<td>85854</td>
<td></td>
</tr>
<tr>
<td>6-7/8&quot;</td>
<td>85855</td>
<td></td>
</tr>
<tr>
<td>7-5/8&quot;</td>
<td>85861</td>
<td></td>
</tr>
<tr>
<td>8&quot;</td>
<td>85864</td>
<td></td>
</tr>
</tbody>
</table>

Extension Bars

<table>
<thead>
<tr>
<th>Female Dr.</th>
<th>Male Sq. Dr.</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8&quot;</td>
<td>1/2&quot;</td>
<td>3899</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>3/8&quot;</td>
<td>4900</td>
</tr>
<tr>
<td>5/8&quot;</td>
<td>3/4&quot;</td>
<td>4902</td>
</tr>
<tr>
<td>5/8&quot;</td>
<td>3/4&quot;</td>
<td>4912</td>
</tr>
<tr>
<td>1&quot;</td>
<td>3/4&quot;</td>
<td>5913</td>
</tr>
<tr>
<td>1&quot;</td>
<td>1-1/2&quot;</td>
<td>5912</td>
</tr>
<tr>
<td>1&quot;</td>
<td>#5 Spline</td>
<td>A1695</td>
</tr>
<tr>
<td>1-1/2&quot;</td>
<td>1&quot;</td>
<td>84900</td>
</tr>
<tr>
<td>1-1/2&quot;</td>
<td>#5 Spline</td>
<td>A2495</td>
</tr>
<tr>
<td>1-1/2&quot;</td>
<td>#5 Spline</td>
<td>A9524</td>
</tr>
</tbody>
</table>

Deep length, 12 point, metric and other sockets also available.
Industrial Impact Wrench Accessories

Impact Wrench Drill Chuck

Designed for use on standard impact tools.

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1012C</td>
<td>1/2&quot; Square Drive to 1/2&quot; Chuck</td>
</tr>
<tr>
<td>1014C</td>
<td>3/8&quot; Square Drive to 3/8&quot; Chuck</td>
</tr>
</tbody>
</table>

Hex Drive Shank Adapters

Converts slip chuck to square drive

<table>
<thead>
<tr>
<th>Hex Drive</th>
<th>Sq. Drive</th>
<th>Length</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>2&quot;</td>
<td>250SH14-2</td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>4&quot;</td>
<td>250SH14-4</td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>6&quot;</td>
<td>250SH14-6</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>3/8&quot;</td>
<td>2&quot;</td>
<td>250SH38-2</td>
</tr>
<tr>
<td>7/16&quot;</td>
<td>3/8&quot;</td>
<td>3&quot;</td>
<td>437SH38-3</td>
</tr>
<tr>
<td>7/16&quot;</td>
<td>3/8&quot;</td>
<td>5&quot;</td>
<td>437SH38-5</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>1/2&quot;</td>
<td>3&quot;</td>
<td>437SH12-3</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>1/2&quot;</td>
<td>4&quot;</td>
<td>437SH12-4</td>
</tr>
<tr>
<td>5/8&quot;</td>
<td>1/2&quot;</td>
<td>3&quot;</td>
<td>EX502-3</td>
</tr>
<tr>
<td>5/8&quot;</td>
<td>1/2&quot;</td>
<td>5&quot;</td>
<td>EX502-5</td>
</tr>
<tr>
<td>5/8&quot;</td>
<td>1/2&quot;</td>
<td>6&quot;</td>
<td>7151-3</td>
</tr>
<tr>
<td>5/8&quot;</td>
<td>1/2&quot;</td>
<td>6&quot;</td>
<td>7152-6</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>3/4&quot;</td>
<td>3&quot;</td>
<td>EX758-3</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>3/4&quot;</td>
<td>5&quot;</td>
<td>EX758-5</td>
</tr>
</tbody>
</table>

Other sizes and lengths available.

Industrial-Duty Impact Socket Sets

6 pt. Standard 3/8" Drive
Set No. 313SS - 8 pieces (with tray)
Sizes:
- 5/16", 3/8", 7/16", 1/2",

6 pt. Deep 3/8" Drive
Set No. 314SS - 8 pieces (with tray)
Sizes:
- 5/16", 3/8", 7/16", 1/2",

6 pt. Standard 1/2" Drive
Set No. 411 - 11 pieces (with tray)
Sizes:
- 7/16", 1/2", 9/16", 5/8",
- 11/16", 3/4", 13/16",
- 7/8", 15/16", 1", 1-1/16"

6 pt. Deep 1/2" Drive
Set No. 412 - 11 pieces (with tray)
Sizes:
- 3/8", 7/16", 1/2", 9/16",
- 13/16", 7/8", 15/16", 1"

6 pt. Deep 3/4" Drive
Set No. 608 - 8 pieces (tray not included)
Sizes:
- 7/8", 15/16", 1",
- 1-1/16", 1-1/8", 1-1/4",
- 1-5/16", 1-1/2"

6 pt. Deep 3/4" Drive
Set No. 609 - 9 pieces (tray not included)
Sizes:
- 3/4", 13/16", 7/8",
- 15/16", 1", 1-1/16",
- 1-1/8", 1-3/16", 1-1/4"

6 pt. Standard 3/4" Drive
Set No. IS-68 - 8 pieces (with metal tray)
Sizes:
- 1", 1-1/16", 1-1/8",
- 1-1/4", 1-5/16", 1-3/8",
- 1-7/16", 1-1/2"

Michigan Pneumatic: Model T01044BK

Driver Set - 99 Pieces (with case)

- (8) PH: 0, 1, 2, 2, 2, 2, 2, 3
- (8) PZ: 0, 1, 2, 2, 2, 2, 3
- (10) Star: T8, T10, T20, T25, T27, T30, T30, T40, T45
- (8) Star (tamper): T8, T10, T15, T20, T25, T27, T30, T40
- (9) Hex: 1.5, 2, 2.5, 3, 4, 5, 5.5, 6, 8mm
- (10) Hex: 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 7/32, 3/16, 14"
- (6) Hex (tamper): 2, 2.5, 3, 4, 5, 6mm
- (4) Square: 0, 1, 2, 3
- (6) Hex (tamper): 5/64, 3/32, 7/64, 1/8, 9/64, 5/32"
- (3) Clutch: 1, 2, 3
- (3) Torq-set: 6, 8, 10
- (4) Tri-wing®: 1, 2, 3, 4
- (4) Spanner: 4, 6, 8, 10
- (3) Spline: M5, M6, M8
- (9) Slotted: 3, 4, 4.5, 5, 5.5, 6, 6.5, 7, 8mm
- (1) Coupler 1/4" Dr. x 1/4" Hex
- (1) 1/4" Dr. x H1/4" Aluminum
- (1) Bit Holder
- (1) 1/4" Dr. Ratchet Head
- (1) Multihandle

Deep length, 12 point, metric and other sockets also available.
Impact & Screwdriver Accessories

### Slotted Insert Bits
1/4" Hex

<table>
<thead>
<tr>
<th>Screw Size</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>250SS1</td>
</tr>
<tr>
<td>2</td>
<td>250SS2</td>
</tr>
<tr>
<td>3</td>
<td>250SS3</td>
</tr>
<tr>
<td>4</td>
<td>250SS4</td>
</tr>
</tbody>
</table>

### Phillips® Insert Bits
1/4" Hex

<table>
<thead>
<tr>
<th>Screw Size</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>250PB0</td>
</tr>
<tr>
<td>1</td>
<td>250PB1</td>
</tr>
<tr>
<td>2</td>
<td>250PB2</td>
</tr>
<tr>
<td>3</td>
<td>250PB3</td>
</tr>
</tbody>
</table>

### Bit Holder for 1/4" Hex Insert Bits

**Magnetic**
MBHR14  2-7/8" Length, 1/4" Hex Shank

**Non-Magnetic**
BHR14   2-7/8" Length, 1/4" Hex Shank

### Hex Socket Insert Bits
1/4" Hex

<table>
<thead>
<tr>
<th>Screw Size</th>
<th>Hex Size</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cap</td>
<td>Set</td>
<td>1/20&quot;</td>
</tr>
<tr>
<td>0</td>
<td>3</td>
<td>1/20&quot;</td>
</tr>
<tr>
<td>1</td>
<td>5-6</td>
<td>1/16&quot;</td>
</tr>
<tr>
<td>2-3</td>
<td>8</td>
<td>5/64&quot;</td>
</tr>
<tr>
<td>4-5</td>
<td>10</td>
<td>3/32&quot;</td>
</tr>
<tr>
<td>-</td>
<td>1/4&quot;</td>
<td>1/8&quot;</td>
</tr>
<tr>
<td>10</td>
<td>5/16&quot;</td>
<td>5/32&quot;</td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>3/8&quot;</td>
<td>3/16&quot;</td>
</tr>
<tr>
<td>-</td>
<td>1/2&quot;</td>
<td>7/32&quot;</td>
</tr>
<tr>
<td>5/16&quot;</td>
<td>1/2&quot;</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>5/8&quot;</td>
<td>5/16&quot;</td>
</tr>
<tr>
<td>7/16&quot; - 1/2&quot;</td>
<td>3/4&quot;</td>
<td>3/8&quot;</td>
</tr>
</tbody>
</table>

### Additional types and models of bits available.

### Slotted Power Bits
1/4" Hex

<table>
<thead>
<tr>
<th>Screw Size</th>
<th>Overall Length</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1F-2R</td>
<td>1-15/16&quot;</td>
<td>20-1S</td>
</tr>
<tr>
<td>2F-3R</td>
<td>1-15/16&quot;</td>
<td>20-2S</td>
</tr>
<tr>
<td>3F-4R</td>
<td>1-15/16&quot;</td>
<td>20-3S</td>
</tr>
<tr>
<td>4F-5R</td>
<td>1-15/16&quot;</td>
<td>20-4S</td>
</tr>
<tr>
<td>5F-6R</td>
<td>1-15/16&quot;</td>
<td>20-5S</td>
</tr>
<tr>
<td>6F-7R</td>
<td>1-15/16&quot;</td>
<td>20-7S</td>
</tr>
<tr>
<td>8F-10R</td>
<td>1-15/16&quot;</td>
<td>20-8S</td>
</tr>
<tr>
<td>10F-12R</td>
<td>1-15/16&quot;</td>
<td>20-9S</td>
</tr>
<tr>
<td>12F-14R</td>
<td>1-15/16&quot;</td>
<td>20-10S</td>
</tr>
<tr>
<td>1F-2R</td>
<td>3&quot;</td>
<td>23-1S</td>
</tr>
<tr>
<td>2F-3R</td>
<td>3&quot;</td>
<td>23-2S</td>
</tr>
<tr>
<td>3F-4R</td>
<td>3&quot;</td>
<td>23-3S</td>
</tr>
<tr>
<td>4F-5R</td>
<td>3&quot;</td>
<td>23-4S</td>
</tr>
<tr>
<td>5F-6R</td>
<td>3&quot;</td>
<td>23-5S</td>
</tr>
<tr>
<td>6F-7R</td>
<td>3&quot;</td>
<td>23-6S</td>
</tr>
<tr>
<td>8F-10R</td>
<td>3&quot;</td>
<td>23-8S</td>
</tr>
<tr>
<td>10F-12R</td>
<td>3&quot;</td>
<td>23-9S</td>
</tr>
<tr>
<td>12F-14R</td>
<td>3&quot;</td>
<td>23-10S</td>
</tr>
</tbody>
</table>

### Phillips® Power Bits
1/4" Hex

<table>
<thead>
<tr>
<th>Point Size</th>
<th>Overall Length</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1-15/16&quot;</td>
<td>30-1P</td>
</tr>
<tr>
<td>2</td>
<td>1-15/16&quot;</td>
<td>30-2P</td>
</tr>
<tr>
<td>3</td>
<td>1-15/16&quot;</td>
<td>30-3P</td>
</tr>
</tbody>
</table>

### Hex Socket Power Bits
1/4" Hex

<table>
<thead>
<tr>
<th>Screw Size</th>
<th>Hex Size</th>
<th>Overall Length</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cap</td>
<td>Set</td>
<td>1/20&quot;</td>
<td>70-H1</td>
</tr>
<tr>
<td>1</td>
<td>5-6</td>
<td>1/16&quot;</td>
<td>70-H2</td>
</tr>
<tr>
<td>2-3</td>
<td>8</td>
<td>5/64&quot;</td>
<td>70-H3</td>
</tr>
<tr>
<td>4-5</td>
<td>10</td>
<td>3/32&quot;</td>
<td>70-H5</td>
</tr>
<tr>
<td>-</td>
<td>1/4&quot;</td>
<td>1/8&quot;</td>
<td>70-H7</td>
</tr>
<tr>
<td>10</td>
<td>5/16&quot;</td>
<td>5/32&quot;</td>
<td>70-H8</td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>3/8&quot;</td>
<td>3/16&quot;</td>
<td>70-H9</td>
</tr>
<tr>
<td>-</td>
<td>1/2&quot;</td>
<td>7/32&quot;</td>
<td>70-H10</td>
</tr>
<tr>
<td>5/16&quot;</td>
<td>1/2&quot;-9/16&quot;</td>
<td>1/4&quot;</td>
<td>70-H10</td>
</tr>
</tbody>
</table>

### TORX® Power Bits
1/4" Hex

<table>
<thead>
<tr>
<th>TORX® Size</th>
<th>Overall Length</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>T8</td>
<td>1-15/16&quot;</td>
<td>62-T8</td>
</tr>
<tr>
<td>T10</td>
<td>1-15/16&quot;</td>
<td>62-T10</td>
</tr>
<tr>
<td>T15</td>
<td>1-15/16&quot;</td>
<td>62-T15</td>
</tr>
<tr>
<td>T20</td>
<td>1-15/16&quot;</td>
<td>62-T20</td>
</tr>
<tr>
<td>T25</td>
<td>1-15/16&quot;</td>
<td>62-T25</td>
</tr>
<tr>
<td>T27</td>
<td>1-15/16&quot;</td>
<td>62-T27</td>
</tr>
<tr>
<td>T30</td>
<td>1-15/16&quot;</td>
<td>62-T30</td>
</tr>
<tr>
<td>T40</td>
<td>1-15/16&quot;</td>
<td>62-T40</td>
</tr>
</tbody>
</table>

Other types, sizes and lengths available.
Reversible Screwdrivers

Nippon Pneumatic  Model ND-6SDY
Screwdriver - Impact Type
Heavy-duty straight impact driver for production fastening applications. Features a built-in power regulator and 1/4" slip chuck bit holder.

- Screw Capacity: 5/16"
- Free Speed: 6000 rpm
- Torque Range: 159-442 in.-lbs.
- Rec’d Hose Size: 1/4"
- Length: 7-11/16"
- Weight: 2.6 lbs.
- Air Inlet Thread: 1/4"
- Avg. Air Consumption: 5.3 cfm

Nippon Pneumatic  Model ND-6HSX
Screwdriver - Impact Type
Heavy-duty, high speed, high torque impact driver features a divertible rear exhaust, straight handle and easy to operate lever throttle. Also features a 1/4" slip chuck bit holder for rapid bit change.

- Screw Capacity: 5/16"
- Free Speed: 10500 rpm
- Rec’d Hose Size: 1/4"
- Length: 8-11/16"
- Weight: 2.1 lbs.
- Air Inlet Thread: 1/4"
- Avg. Air Consumption: 8.8 cfm

Nippon Pneumatic  Model ND-5LPX
Screwdriver - Impact Type
High speed impacting type screwdriver for heavy-duty production fastening applications. Lightweight and ergonomically balanced with a divertible exhaust for changing positions rapidly.

- Screw Capacity: 1/4"
- Free Speed: 11000 rpm
- Torque Range: 160-200 in.-lbs.
- Rec’d Hose Size: 1/4"
- Length: 6-13/32"
- Weight: 1.4 lbs.
- Air Inlet Thread: 1/4"
- Avg. Air Consumption: 5.3 cfm

Nippon Pneumatic  Model ND-6HPAX
Screwdriver - Impact Type
High torque impact driver featuring a 1/4" slip chuck bit holder for rapid bit change. Lightweight and easy to operate.

- Screw Capacity: 5/16"
- Free Speed: 8000 rpm
- Torque Range: 250-575 in.-lbs.
- Rec’d Hose Size: 1/4"
- Length: 6-11/16"
- Weight: 2.2 lbs.
- Air Inlet Thread: 1/4"
- Avg. Air Consumption: 8.8 cfm

Nippon Pneumatic  Model ND-6LFAX
Screwdriver - Impact Type
High torque pistol impact driver with a rapid forward and reverse thumb lever offers fast rundown of fasteners. Ideal for large wood screws or self-drilling and tapping screws.

- Screw Capacity: 1/4"
- Free Speed: 11000 rpm
- Rec’d Hose Size: 1/4"
- Length: 6"
- Weight: 1.8 lbs.
- Air Inlet Thread: 1/4"
- Avg. Air Consumption: 8.8 cfm

See pages 24-25 for screwdriver accessories.
Reversible Screwdrivers

Michigan Pneumatic Model MP-800-ST

**Screwdriver** - Adjustable Clutch

Industrial, rear exhaust screwdriver is equipped with a quick change chuck for greater ease. An adjustable clutch provides a high degree of torque control through internal spring tension. Ideal for most applications.

<table>
<thead>
<tr>
<th>Screw Capacity</th>
<th>1/4&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Speed</td>
<td>1800 rpm</td>
</tr>
<tr>
<td>Torque Range</td>
<td>45-115 in.-lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>10&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>2.5 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>4 cfm</td>
</tr>
</tbody>
</table>

Michigan Pneumatic Model MP-525DD

**Screwdriver** - Direct Drive

Reversible 1/4" hex nutrunner is ideal for maintenance and assembly. Equipped with QC-50 screwdriver attachment.

<table>
<thead>
<tr>
<th>Model</th>
<th>MP-525DD</th>
<th>MP-527DD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Torque Range</td>
<td>19-55 in.-lbs.</td>
<td>35-75 in.-lbs.</td>
</tr>
<tr>
<td>Free Speed</td>
<td>2000 rpm</td>
<td>500 rpm</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/4&quot;</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>6-1/2&quot;</td>
<td>7-1/2&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>2.25 lbs.</td>
<td>3 lbs.</td>
</tr>
</tbody>
</table>

Michigan Pneumatic Model MP-9905-ST

**Screwdriver** - Adjustable Clutch

Lightweight screwdriver perfect for small parts rebuilding, metal and wood component work. Adjustable torque control is easily changed by tightening or loosening the control spring.

<table>
<thead>
<tr>
<th>Screw Capacity</th>
<th>1/4&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Speed</td>
<td>1800 rpm</td>
</tr>
<tr>
<td>Torque Range</td>
<td>20-60 in.-lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>7-3/4&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>2.3 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>4 cfm</td>
</tr>
</tbody>
</table>

Michigan Pneumatic Model MP-0955-ST

**Screwdriver** - Positive Clutch

Positive clutch screwdriver provides manually controlled clutch engagement and release by operator pressure on the tool. Ideal for applications where pull-up conditions require greater running torque than final torque. Great for overcoming difficult screwdriving jobs.

<table>
<thead>
<tr>
<th>Screw Capacity</th>
<th>1/4&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Speed</td>
<td>1800 rpm</td>
</tr>
<tr>
<td>Torque Range</td>
<td>45-115 in.-lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>7&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>2.5 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>4 cfm</td>
</tr>
</tbody>
</table>

Michigan Pneumatic Model MP-7855-ST

**Screwdriver** - Adjustable Clutch

Adjustable or cushion type clutch provides adjustable automatic torque control through internal spring tension on clutch jaws. This general purpose clutch is suitable for most applications.

<table>
<thead>
<tr>
<th>Screw Capacity</th>
<th>1/4&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Speed</td>
<td>1800 rpm</td>
</tr>
<tr>
<td>Torque Range</td>
<td>45-115 in.-lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>7&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>2.5 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>4 cfm</td>
</tr>
</tbody>
</table>

See pages 24-25 for screwdriver accessories.
Reversible & Shut-Off Screwdrivers

**Michigan Pneumatic Model MP-0909-ST**

**Screwdriver** - Adjustable Clutch

This tool provides full power performance with little maintenance. Ideal for production use where maximum power output is needed. Reversible with pressure actuated trigger.

<table>
<thead>
<tr>
<th>Screw Capacity</th>
<th>Length</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot;</td>
<td>8-1/4&quot;</td>
<td>1.3 lbs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Free Speed</th>
<th>Torque Range</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>1500 rpm</td>
<td>10-30 in.-lbs.</td>
<td>3/8&quot;</td>
<td>1/4&quot;</td>
<td>4 cfm</td>
</tr>
</tbody>
</table>

**Nippon Pneumatic Model SD-4**

**Screwdriver** - Adjustable Clutch

Industrial screwdriver features a push to start mechanism for greater operator control. Adjustable torque control is easily changed by tightening or loosening control spring. Lightweight for industrial applications.

<table>
<thead>
<tr>
<th>Screw Capacity</th>
<th>Length</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/16&quot;</td>
<td>8-3/4&quot;</td>
<td>1.3 lbs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Free Speed</th>
<th>Torque Range</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000 rpm</td>
<td>9-30 in.-lbs.</td>
<td>1/4&quot;</td>
<td>1/8&quot;</td>
<td>3 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic Model MP-76-A**

**Screwdriver** - Positive Clutch

Lightweight screwdriver provides industrial quality at a low price. Excellent balance and a high torque mechanism. Good for small parts rebuilding, wood and metal component work, and auto service work. Reversible with pressure actuated trigger.

<table>
<thead>
<tr>
<th>Screw Capacity</th>
<th>Length</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/32&quot;</td>
<td>7-9/16&quot;</td>
<td>2.2 lbs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Free Speed</th>
<th>Torque Range</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>9000 rpm</td>
<td>12-20 in.-lbs.</td>
<td>1/4&quot;</td>
<td>1/8&quot;</td>
<td>3 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic Model MP-000AR2LC12**

**Screwdriver** - Adjustable Clutch

Adjustable or cushion type clutch provides adjustable automatic torque control through internal spring tension on clutch jaws. This general purpose clutch is suitable for most applications.

<table>
<thead>
<tr>
<th>Screw Capacity</th>
<th>Length</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>#12</td>
<td>8-3/4&quot;</td>
<td>2.25 lbs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Free Speed</th>
<th>Torque Range</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>1850 rpm</td>
<td>3-14 in.-lbs.</td>
<td>3/8&quot;</td>
<td>1/4&quot;</td>
<td>3 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic Model MP-30P-IR**

**Screwdriver** - Adjustable Clutch

Cushion clutch is adjustable for accurate torque control. Once set, it will not tighten beyond the predetermined torque limit. Reduces work spoilage. Parts are interchangeable with Ingersoll-Rand Model 00AR-2LCX21 screwdrivers.

<table>
<thead>
<tr>
<th>Screw Capacity</th>
<th>Length</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot;</td>
<td>9-5/8&quot;</td>
<td>2.438 lbs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Free Speed</th>
<th>Torque Range</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>1300 rpm</td>
<td>20-90 in.-lbs.</td>
<td>3/8&quot;</td>
<td>1/8&quot;</td>
<td>4 cfm</td>
</tr>
</tbody>
</table>

See pages 24-25 for screwdriver accessories.
**Reversible Shut-Off Screwdrivers**

**Michigan Pneumatic**

**Straight Automatic Shut-Off Screwdrivers**

![MP-ST-1015](image1)  
![MP-ST-1807](image2)

**Straight Shut-Off Screwdriver Specifications**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Free Speed</th>
<th>Torque</th>
<th>Length</th>
<th>Weight</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-ST-1011</td>
<td>1100 rpm</td>
<td>2 - 6 in.-lbs.</td>
<td>8&quot;</td>
<td>0.6 lbs.</td>
<td>1/4&quot;</td>
<td>1/8&quot;</td>
<td>5.2 cfm</td>
</tr>
<tr>
<td>MP-ST-1015</td>
<td>1500 rpm</td>
<td>3.5 - 8.7 in.-lbs.</td>
<td>8&quot;</td>
<td>0.6 lbs.</td>
<td>1/4&quot;</td>
<td>1/8&quot;</td>
<td>5.6 cfm</td>
</tr>
<tr>
<td>MP-ST-1409</td>
<td>900 rpm</td>
<td>9.6 - 17 in.-lbs.</td>
<td>8-1/2&quot;</td>
<td>1.3 lbs.</td>
<td>1/4&quot;</td>
<td>1/8&quot;</td>
<td>7.0 cfm</td>
</tr>
<tr>
<td>MP-ST-1807</td>
<td>700 rpm</td>
<td>13 - 34.5 in.-lbs.</td>
<td>9-3/8&quot;</td>
<td>1.8 lbs.</td>
<td>3/8&quot;</td>
<td>1/4&quot;</td>
<td>10.5 cfm</td>
</tr>
<tr>
<td>MP-ST-1817</td>
<td>1700 rpm</td>
<td>8.5 - 26 in.-lbs.</td>
<td>9-3/8&quot;</td>
<td>1.8 lbs.</td>
<td>3/8&quot;</td>
<td>1/4&quot;</td>
<td>10.5 cfm</td>
</tr>
<tr>
<td>MP-ST-2208</td>
<td>800 rpm</td>
<td>26 - 52 in.-lbs.</td>
<td>10-1/2&quot;</td>
<td>2.5 lbs.</td>
<td>3/8&quot;</td>
<td>1/4&quot;</td>
<td>17.5 cfm</td>
</tr>
</tbody>
</table>

**Pistol Automatic Shut-Off Screwdrivers**

![MP-STP-1807](image3)  
![MP-200AS-ST](image4)

![MP-STP-1011](image5)

**Pistol Shut-Off Screwdriver Specifications**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Free Speed</th>
<th>Torque</th>
<th>Length</th>
<th>Weight</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-STP-1011</td>
<td>1100 rpm</td>
<td>2 - 6 in.-lbs.</td>
<td>7&quot;</td>
<td>1.10 lbs.</td>
<td>1/4&quot;</td>
<td></td>
<td>7.0 cfm</td>
</tr>
<tr>
<td>MP-STP-1015</td>
<td>1500 rpm</td>
<td>3.5 - 8.7 in.-lbs.</td>
<td>7-1/4&quot;</td>
<td>1.40 lbs.</td>
<td>1/4&quot;</td>
<td></td>
<td>7.0 cfm</td>
</tr>
<tr>
<td>MP-STP-1409</td>
<td>900 rpm</td>
<td>9.6 - 17 in.-lbs.</td>
<td>7-1/4&quot;</td>
<td>1.80 lbs.</td>
<td>1/4&quot;</td>
<td></td>
<td>10.5 cfm</td>
</tr>
<tr>
<td>MP-STP-1807</td>
<td>700 rpm</td>
<td>13 - 34.5 in.-lbs.</td>
<td>8-1/8&quot;</td>
<td>2.40 lbs.</td>
<td>3/8&quot;</td>
<td></td>
<td>17.5 cfm</td>
</tr>
<tr>
<td>MP-STP-1817</td>
<td>1700 rpm</td>
<td>8.5 - 26 in.-lbs.</td>
<td>8-1/8&quot;</td>
<td>2.40 lbs.</td>
<td>3/8&quot;</td>
<td></td>
<td>17.5 cfm</td>
</tr>
<tr>
<td>MP-STP-2208</td>
<td>800 rpm</td>
<td>26 - 52 in.-lbs.</td>
<td>8-7/8&quot;</td>
<td>2.80 lbs.</td>
<td>3/8&quot;</td>
<td></td>
<td>17.5 cfm</td>
</tr>
<tr>
<td>MP-201AS-ST</td>
<td>1100 rpm</td>
<td>3-40 in.-lbs.</td>
<td>8-5/16&quot;</td>
<td>1.80 lbs.</td>
<td>3/8&quot;</td>
<td>1/4&quot;</td>
<td>4.0 cfm</td>
</tr>
<tr>
<td>MP-200AS-ST</td>
<td>550 rpm</td>
<td>2-45 in.-lbs.</td>
<td>8-3/4&quot;</td>
<td>1.85 lbs.</td>
<td>1/4&quot;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The STP series torque control screwdrivers are compact and quiet. Die cast aluminum housing and balanced handle design combine to reduce operator fatigue. The STP Series features integrated trigger operated forward-reverse. Model MP-200AS-ST and Model MP-201AS-ST include two extra springs for different torque ranges, depending on application.

See pages 24-25 for screwdriver accessories.
# Angle & General Line Drills

**Michigan Pneumatic Model MP-31DR-ST**

*1/4" Air Drill - Reversible*

Features a forward/reverse switch and a two-speed trigger. Durable composite motor housing and planetary gear system with needle bearings makes for a versatile, lightweight design well-suited for multiple applications. Replacement Jacobs SM1G61-T1 Multi-Craft\textsuperscript{®} chuck available.

<table>
<thead>
<tr>
<th>Model</th>
<th>MP-2100-ST</th>
<th>MP-2145-ST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drilling Capacity</td>
<td>3/8&quot;</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>2200 rpm</td>
<td>4500 rpm</td>
</tr>
<tr>
<td>Spindle Thread</td>
<td>3/8&quot;-24</td>
<td>3/8&quot;-24</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>5-13/16&quot;</td>
<td>6-7/64&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>1.3 lbs.</td>
<td>1.7 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>4 cfm</td>
<td>4 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic Model MP-1403**

*1/4" Palm Drill - Non-Reversible*

Ideal for aircraft repair and maintenance work. Small and lightweight design to fit in the palm of the hand. Replacement Jacobs SM1G61-T1 Multi-Craft\textsuperscript{®} chuck available.

<table>
<thead>
<tr>
<th>Model</th>
<th>MP-500AH-ST</th>
<th>MP-501AH-ST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drilling Capacity</td>
<td>3/8&quot;</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>1900 rpm</td>
<td>1400 rpm</td>
</tr>
<tr>
<td>Spindle Thread</td>
<td>3/8&quot;-24</td>
<td>3/8&quot;-24</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>7-1/4&quot;</td>
<td>8-1/4&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>2 lbs.</td>
<td>2 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>4 cfm</td>
<td>4 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic Model MP-1403**

*3/8" Straight Drills - Non-Reversible*

Designed with a three-way planetary gear reduction system for drilling the thickest metal or wood. Housed in a lightweight, rugged aluminum handle. Equipped with Jacobs SM1G61-T1 Multi-Craft\textsuperscript{®} chuck.

<table>
<thead>
<tr>
<th>Model</th>
<th>MP-2100-ST</th>
<th>MP-2145-ST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drilling Capacity</td>
<td>3/8&quot;</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>2200 rpm</td>
<td>4500 rpm</td>
</tr>
<tr>
<td>Spindle Thread</td>
<td>3/8&quot;-24</td>
<td>3/8&quot;-24</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>5-13/16&quot;</td>
<td>6-7/64&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>1.3 lbs.</td>
<td>1.7 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>4 cfm</td>
<td>4 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic Model MP-500AH-ST**

*3/8" Angle Drill - Non-Reversible*

Right angle drill is designed to get into hard to reach areas where pistol types are not accessible. Durable and lightweight. Equipped with Jacobs SM4G61-T1 Multi-Craft\textsuperscript{®} chuck.

<table>
<thead>
<tr>
<th>Model</th>
<th>MP-500AH-ST</th>
<th>MP-501AH-ST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drilling Capacity</td>
<td>3/8&quot;</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>1900 rpm</td>
<td>1400 rpm</td>
</tr>
<tr>
<td>Spindle Thread</td>
<td>3/8&quot;-24</td>
<td>3/8&quot;-24</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>8-1/2&quot;</td>
<td>8-1/4&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>2 lbs.</td>
<td>2 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>4 cfm</td>
<td>4 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic Model MP-510AH-ST**

*3/8" Angle Drill - Reversible*

90° right angle drill is designed to get into hard to reach areas. Lightweight, compact, reversible, with variable speed control for most drilling applications. Equipped with Jacobs SM4G61-T1 Multi-Craft\textsuperscript{®} chuck.

<table>
<thead>
<tr>
<th>Model</th>
<th>MP-310AH-ST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drilling Capacity</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>1900 rpm</td>
</tr>
<tr>
<td>Spindle Thread</td>
<td>3/8&quot;-24</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>8-1/2&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>1.7 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>4 cfm</td>
</tr>
</tbody>
</table>

See page 42 for drill accessories.
Aircraft & General Line Drills

**Michigan Pneumatic Model MP-31D-ST**
**1/4" Pistol Drill** - Non-Reversible

Ideal for aircraft repair and maintenance work. Small and lightweight design to fit in the palm of the hand. Replacement Jacobs SM1G61-T1 Multi-Craft® chuck available.

<table>
<thead>
<tr>
<th>Drilling Capacity</th>
<th>Length</th>
<th>Free Speed</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot;</td>
<td>5-5/8&quot;</td>
<td>2800 rpm</td>
<td>1.3 lbs.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spindle Thread</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8&quot;-24</td>
<td>1/4&quot;</td>
<td>4 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic Model MP-7802-ST**
**3/8" Pistol Drill** - Non-Reversible

Lightweight drill designed with a full planetary gearing system for hole sawing and precision drilling. Ideal for production use. Equipped with Jacobs SM4G61-T1 Multi-Craft® chuck.

<table>
<thead>
<tr>
<th>Drilling Capacity</th>
<th>Length</th>
<th>Free Speed</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8&quot;</td>
<td>6-1/2&quot;</td>
<td>2200 rpm</td>
<td>2.5 lbs.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spindle Thread</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8&quot;-24</td>
<td>1/4&quot;</td>
<td>4 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic Model MP-7803-ST**
**1/2" Pistol Drill** - Non-Reversible

Lightweight drill designed with a full planetary gearing system for hole sawing and precision drilling. Ideal for production use. Equipped with Jacobs SM8K61-T1 Multi-Craft® chuck and dead handle.

<table>
<thead>
<tr>
<th>Drilling Capacity</th>
<th>Length</th>
<th>Free Speed</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2&quot;</td>
<td>7&quot;</td>
<td>500 rpm</td>
<td>4 lbs.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spindle Thread</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8&quot;-24</td>
<td>3/8&quot;</td>
<td>4 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic Model MP-525-ST**
**3/8" Pistol Drill** - Reversible

Lightweight with a controllable teasing trigger. Features a 1/2 HP motor with a super quiet handle exhaust. Applications include screwdriving, honing and reaming. Equipped with Jacobs SM4G61-T1 Multi-Craft® chuck. QC-50 1/4" hex screwdriver adapter available.

<table>
<thead>
<tr>
<th>Drilling Capacity</th>
<th>Length</th>
<th>Free Speed</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8&quot;</td>
<td>6-1/2&quot;</td>
<td>2000 rpm</td>
<td>2.5 lbs.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spindle Thread</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8&quot;-24</td>
<td>1/4&quot;</td>
<td>4 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic Model MP-527-ST**
**1/2" Pistol Drill** - Reversible

Double geared drill handles the toughest chores. Features a teasing action trigger for speed control. Great for screwdriving, tapping and hole sawing. Equipped with Jacobs SM8K61-T1 Multi-Craft® chuck and dead handle. QC-50 1/4" hex screwdriver adapter available.

<table>
<thead>
<tr>
<th>Drilling Capacity</th>
<th>Length</th>
<th>Free Speed</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2&quot;</td>
<td>7-1/2&quot;</td>
<td>500 rpm</td>
<td>3.25 lbs.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spindle Thread</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8&quot;-24</td>
<td>1/4&quot;</td>
<td>4 cfm</td>
</tr>
</tbody>
</table>

See page 42 for drill accessories.
**Aircraft Drills**

**Michigan Pneumatic**

### 45° & 90° Angle Drills - Non-Reversible

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Head Angle</th>
<th>Drilling Capacity</th>
<th>Free Speed</th>
<th>Internal Spindle Thread</th>
<th>Length</th>
<th>Weight</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-9030</td>
<td>90°</td>
<td>1/4&quot;</td>
<td>3000 rpm</td>
<td>1/4&quot;-28</td>
<td>10-11/16&quot;</td>
<td>1.90 lbs.</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>7.0 cfm</td>
</tr>
<tr>
<td>MP-3045</td>
<td>45°</td>
<td></td>
<td></td>
<td></td>
<td>10-29/32&quot;</td>
<td>1.90 lbs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP-9030EXT</td>
<td>90°</td>
<td></td>
<td></td>
<td></td>
<td>13-3/8&quot;</td>
<td>2.00 lbs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP-9030EXT-45</td>
<td>45°</td>
<td></td>
<td></td>
<td></td>
<td>14-7/8&quot;</td>
<td>2.00 lbs.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Features rear exhaust.** Milled motor housing, steel alloy cylinder and rotor for long tool life. Available in standard or extended length head with 45° or 90° angle. Precision machined for smooth and quiet operation. **Models MP-9039EXT and MP-9039EXT-45 with 9/32”-40 internal spindle thread also available. (Bit not included.)**

---

**Michigan Pneumatic**

**Model MP-3603**

### 360° Drill - Non-Reversible


- **Drilling Capacity** .................. 1/4"
- **Free Speed** .......................... 3000 rpm
- **Spindle Thread** ..................... 1/4"-28 Internal
- **Rec’d Hose Size** .................... 1/4"
- **Length** .................................. 10-5/8" (3-1/4")
- **Weight** .................................. 2.0 lbs.
- **Air Inlet Thread** ................... 1/4"
- **Avg. Air Consumption** ............ 7 cfm

**Bit not included**

---

**Michigan Pneumatic**

**Model MP-FD30261**

### 360° Drill - Non-Reversible

Smooth, quiet design featuring steel alloy cylinder and rotor. Feather trigger for better control. Head may be adjusted to desired angle. **Model MP-FD30161 with straight handle available.**

- **Drilling Capacity** .................. 1/4"
- **Free Speed** .......................... 3000 rpm
- **Spindle Thread** ..................... 1/4"-28 Internal
- **Rec’d Hose Size** .................... 1/4"
- **Length** .................................. 7" (2.35")
- **Weight** .................................. 2.0 lbs.
- **Air Inlet Thread** ................... 1/4"
- **Avg. Air Consumption** ............ 4 cfm

**Bit not included**
Aircraft Drill Accessories

High Speed Steel
Part No.
Size
Decimal Equivalent
Overall Length
325-40
625-40
#40
0.0980
1"
325-0.125
625-0.125
1/8"
0.1250
1-1/4"
325-30
625-30
#30
0.1285
1-1/4"
325-27
625-27
#27
0.1440
1-1/4"
325-0.1562
625-0.1562
5/32"
0.1562
1-1/4"
325-21
625-21
#21
0.1590
1-1/4"
325-20
625-20
#20
0.1610
1-1/4"
325-16
625-16
#16
0.1770
1-1/4"
325-13
625-13
#13
0.1850
1-1/4"
325-0.1875
625-0.1875
3/16"
0.1875
1-1/4"
325-11
625-11
#11
0.1910
1-1/4"
325-10
625-10
#10
0.1935
1-1/4"
325-0.25
625-0.25
1/4"
0.2500
1-1/4"
325-F
625-F
"F"
0.2570
1-1/4"

High Speed Drill Bits - 135° Threaded Shank
Produced from Industrial-Grade Steel. Split point penetrates on contact and prevents "walking" of bit. Designed for steel (low and medium carbon), steel alloy and stainless steel. Long and Stubby lengths also available.

- HSS designed for cast iron and steel alloy.
- Cobalt designed for steel (low and medium carbon), steel alloy, and stainless steel alloys.

100° Countersink Cutters
Fits any micro-stop counter sink or angle drill with a 1/4"-28 spindle. Cutter and integral pilot are precision ground.

1/2"
328-40
328-38-40
328-12-40
328-38-30
328-12-30
328-27
328-38-27
328-12-27
328-38-21
328-12-21
328-38-10
328-12-10

1/4"
328-0.25
- 
- 

Micro-Stop Countersinks

MPT727 - Mini
Designed to be operated in angle drills with a 1/4"-28 spindle. Features a 3/32" shaft travel and a 9/16" cutter capacity. Adjustable in 0.001 increments and rated for use up to 3000 rpm.

MPT827 - Standard
Features 1/4" shank with 9/32" thread. Will accept up to 1/2" diameter cutters with a 1/4"-28 thread. Rated for up to 3000 rpm and is adjustable in 0.001 increments.

MPT927 - Ball Bearing
The ball bearing style micro-stop countersink featuring same specifications as Model MPT827. Rated for up to 10000 rpm.

Drill Stops
Helps eliminate the worry of drilling too deep into tubing, wiring, etc.

Part No.
Size
Decimal Equivalent
DS47-0
#50
0.0700
DS47-1
#40
0.0890
DS47-2
#30
0.1285
DS47-22
#27
0.1440
DS47-3
#21
0.1590
DS47-4
#20
0.1610
DS47-42
#16
0.1770
DS47-5
#12
0.1890
DS47-6
#10
0.1935
DS47-7
1/4"
0.2500
DS47-8
5/16"
0.3150

Michigan Pneumatic Model MP-309
Cleco Installation Tool
Ideal for aircraft production assembly and mechanics. Quickly install button type and side grip temporary fasteners. Feather trigger and quiet operation round out the features.

Shown with Cleco fastener (not included.)

Length..............................5-1/2"
Weight.............................1.25 lbs.
Rec'd Hose Size ......................1/4"
Air Inlet Thread .....................1/4"

Pilot Size
Body Diameter
7/16"  3/8"  1/2"
#40  328-40  328-38-40  328-12-40
#30  328-30  328-38-30  328-12-30
#27  328-27  -  -
#21  328-21  328-38-21  328-12-21
#10  328-10  328-38-10  328-12-10
1/4"  328-0.25  -  -

100º Countersink Cutters

Michigan Made in the U.S.A.
**Floor Drill & Industrial-Duty Drills**

**Michigan Pneumatic Model MP-719T w/ Bubble Level**

**Floor Drill**

This drill driver is ideal for self-drilling and self-tapping screws in the truck and trailer industries. Features a lower rpm for higher driving and stall torque. Equipped with Jacobs 33BA-1/2 medium-duty chuck and bubble level.

- **Drilling Capacity**: 1/2”
- **Free Speed**: 1500 rpm
- **Spindle Thread**: 1/2”-20
- **Length**: 32-1/2”
- **Weight**: 11 lbs.
- **Rec’d Hose Size**: 3/8”
- **Air Inlet Thread**: 3/8”
- **Avg. Air Consumption**: 26 cfm

**Michigan Pneumatic Model MP-8009**

**3/8” Heavy-Duty Drill - Non-Reversible**

Heavy-duty drill ideal for the aircraft industry. Small, lightweight design fits comfortably in the operator’s hand. Ease of handling and control ensures optimal drilling performance. **Parts are interchangeable with the ARO Model 7364-D drill**. Equipped with Jacobs 22BA-3/8 industrial-duty chuck.

- **Drilling Capacity**: 3/8”
- **Free Speed**: 3000 rpm
- **Spindle Thread**: 3/8”-24
- **Length**: 7”
- **Weight**: 2.5 lbs.
- **Rec’d Hose Size**: 3/8”
- **Air Inlet Thread**: 3/8”
- **Avg. Air Consumption**: 4 cfm

**Michigan Pneumatic Model 15DP-4B - 400 rpm**

**Model 15DP-8B - 800 rpm**

**1/2” Heavy-Duty Drill - Non-Reversible**

**Industrial model.** Compact, powerful pistol grip drill uses precision machined planetary gears to generate high torque to drill through heavy steel or titanium. Handle exhaust and muffler meet OSHA requirements. Equipped with Jacobs 33BA-1/2 heavy-duty chuck and dead handle.

- **Drilling Capacity**: 1/2”
- **Free Speed**: 400 or 800 rpm
- **Spindle Thread**: 1/2”-20
- **Length**: 8-1/2”
- **Weight**: 5.5 lbs.
- **Rec’d Hose Size**: 3/8”
- **Air Inlet Thread**: 3/8”
- **Avg. Air Consumption**: 6 cfm

**Michigan Pneumatic Model 15DP-55B - 55 rpm**

**Model 15DP-1.6B - 160 rpm**

**1/2” Heavy-Duty Drill - Non-Reversible**

**Industrial model.** Precision machined pistol grip drill uses planetary gears to generate high torque to drill through heavy steel or titanium. Handle exhaust and muffler meet OSHA requirements. Equipped with Jacobs 33BA-1/2 heavy-duty chuck and dead handle.

- **Drilling Capacity**: 1/2”
- **Free Speed**: 55 or 160 rpm
- **Spindle Thread**: 1/2”-20
- **Length**: 9-3/4”
- **Weight**: 6.0 lbs.
- **Rec’d Hose Size**: 3/8”
- **Air Inlet Thread**: 3/8”
- **Avg. Air Consumption**: 6 cfm

See page 42 for drill accessories.
**Nippon Pneumatic**

**Model NRD-6SAT**

**1/4" Straight Drill - Non-Reversible**

Compact, lightweight drill fits the palm of the hand. Features a lever throttle for safe, easy start up. Ideal for hard to reach drilling areas. **Equipped with Jacobs 1B-3/8 medium-duty chuck.**

<table>
<thead>
<tr>
<th>Drilling Capacity</th>
<th>Length</th>
<th>Free Speed</th>
<th>Spindle Thread</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot;</td>
<td>6-17/32&quot;</td>
<td>2800 rpm</td>
<td>3/8&quot;-24</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>1.8 lbs.</td>
</tr>
</tbody>
</table>

**Model NRD-6PBT**

**1/4" Heavy-Duty Drill - Non-Reversible**

Ideal for aircraft and sheet metal repair. Lightweight industrial drill with a teasing throttle for starting holes. Exhausts through the handle to avoid blowing debris. **Equipped with Jacobs 1B-3/8 medium-duty chuck.**

<table>
<thead>
<tr>
<th>Drilling Capacity</th>
<th>Length</th>
<th>Free Speed</th>
<th>Spindle Thread</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot;</td>
<td>5-7/8&quot;</td>
<td>2400 rpm</td>
<td>3/8&quot;-24</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>1.8 lbs.</td>
</tr>
</tbody>
</table>

**Model NRD-10PT**

**3/8" Heavy-Duty Drill - Non-Reversible**

Production drill designed for use on assembly and maintenance applications. Bronze end plates ensure long life and durability. Power-to-weight ratio exceeds similar models. **Equipped with Jacobs 22BA-3/8 industrial-duty chuck.**

<table>
<thead>
<tr>
<th>Drilling Capacity</th>
<th>Length</th>
<th>Free Speed</th>
<th>Spindle Thread</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8&quot;</td>
<td>6-1/8&quot;</td>
<td>2000 rpm</td>
<td>3/8&quot;-24</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>2.4 lbs.</td>
</tr>
</tbody>
</table>

**Model NRD-12PAT**

**1/2" Heavy-Duty Drill - Non-Reversible**

Heavy-duty drill built to take the punishment of continuous production use. Rugged design assures the best possible drilling performance. Smoothness allows for accurate drilling, reaming and tapping. Adjustable handle included. **Equipped with Jacobs 33BA-1/2 heavy-duty chuck.**

<table>
<thead>
<tr>
<th>Drilling Capacity</th>
<th>Length</th>
<th>Free Speed</th>
<th>Spindle Thread</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2&quot;</td>
<td>7-3/8&quot;</td>
<td>1500 rpm</td>
<td>1/2&quot;-20</td>
<td>3/8&quot;</td>
<td>1/4&quot;</td>
<td>5.7 lbs.</td>
</tr>
</tbody>
</table>

**Model NRT-8P**

**Reversible Tapper**

Industrial model. Double trigger tapper with two-step quick reverse throttle makes tapping work speedy, leaving a fine finish. **Equipped with NPK Model 6551010080 medium-duty chuck. Model NRT-8P-JTC with Jacobs Tap Chuck available.**

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Length</th>
<th>Free Speed</th>
<th>Spindle Thread</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/16&quot;</td>
<td>7-1/16&quot;</td>
<td>1700 rpm</td>
<td>#1 Jacobs Taper</td>
<td>3/8&quot;</td>
<td>1/4&quot;</td>
<td>2.6 lbs.</td>
</tr>
</tbody>
</table>

**Tap not included**

See pages 39 & 42 for drill accessories.
Step 1. Select Motor No.

<table>
<thead>
<tr>
<th>Motor No.</th>
<th>Free Speed</th>
<th>Drilling</th>
<th>Reaming/ Tapping</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRD-14R</td>
<td>1100 rpm</td>
<td>9/16&quot;</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>NRD-14RU²</td>
<td>1100 rpm</td>
<td>9/16&quot;</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>NRD-16R</td>
<td>900 rpm</td>
<td>5/8&quot;</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>NRD-16RU²</td>
<td>900 rpm</td>
<td>5/8&quot;</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>NRD-19R</td>
<td>750 rpm</td>
<td>3/4&quot;</td>
<td>5/8&quot;</td>
</tr>
<tr>
<td>NRD-19RU²</td>
<td>750 rpm</td>
<td>3/4&quot;</td>
<td>5/8&quot;</td>
</tr>
<tr>
<td>NRD-22R</td>
<td>600 rpm</td>
<td>7/8&quot;</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>NRD-22RU²</td>
<td>600 rpm</td>
<td>7/8&quot;</td>
<td>3/4&quot;</td>
</tr>
</tbody>
</table>

² Underwater Motor

Step 2. Select Spindle Option

- 1/2" Cap. (Option Code: 5C)
- 5/8" Cap. (Option Code: 6C)
- 3/4" Cap. (Option Code: 7C)

Step 3. Select Throttle Option

- Safety Lever Throttle (Option Code: LW)
- Self-Closing Roll Throttle (Option Code: SCT)

Step 4. Select Rear Feed Option

- Feed Screw (Option Code: B)
- Breast Plate (Included with Option W Step 2)

Option Code | Ordering Exceptions
---|---
#1 Morse Taper | NRD-14 Series only (Standard: do not specify)
2M | NRD-16 thru NRD-22 (Standard: do not specify)
5C | NRD-14 Series thru NRD-22 Series
6C or 7C | NRD-19 and NRD-22 Series only
W | Includes Breast Plate (Step 4)

Nippon Pneumatic

Heavy-Duty Reversible Drills

Ideal for production work, boasting smooth operation for accurate drilling, reaming, tapping and woodboring. Possesses the lugging power to maintain speed when under load. Powerful and efficient for use in railroad shops, shipyards, tool rooms and all types of construction work. Features ball bearing support for long life. Includes dead handle. Equipped with 1/2" Air Inlet Thread requiring Avg. Air Consumption of 39 cfm. Recommended hose size of 1/2".

- Built-In Lubricator
- 2 Horse Power Motor, 2-3/8" Feed Length

Example for Ordering

<table>
<thead>
<tr>
<th>MOTOR NO.</th>
<th>SPINDLE FEED OPTION</th>
<th>THROTTLE OPTION</th>
<th>REAR FEED OPTION</th>
<th>MODEL NO. FOR ORDERING</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRD-19R</td>
<td>W Step 2</td>
<td>SCT Step 3</td>
<td>** Step 4</td>
<td>NRD-19RWSCT</td>
</tr>
</tbody>
</table>

**Rear Feed Option omitted per Option Code B exception

See pages 38-39 & 42 for drill accessories.
**Heavy-Duty Drills & Wood Borers**

### Step 1. Select Motor No.

<table>
<thead>
<tr>
<th>Motor No.</th>
<th>Free Speed</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRD-23R</td>
<td>700 rpm</td>
<td>15/16&quot; 3/4&quot;</td>
</tr>
<tr>
<td>NRD-23RU‡</td>
<td>700 rpm</td>
<td>15/16&quot; 3/4&quot;</td>
</tr>
<tr>
<td>NRD-25R</td>
<td>570 rpm</td>
<td>1&quot; 7/8&quot;</td>
</tr>
<tr>
<td>NRD-25RU‡</td>
<td>570 rpm</td>
<td>1&quot; 7/8&quot;</td>
</tr>
<tr>
<td>NRD-28R</td>
<td>450 rpm</td>
<td>1-1/8&quot; 7/8&quot;</td>
</tr>
<tr>
<td>NRD-28RU‡</td>
<td>450 rpm</td>
<td>1-1/8&quot; 7/8&quot;</td>
</tr>
<tr>
<td>NRD-32LR</td>
<td>380 rpm</td>
<td>1-1/4&quot; 1&quot;</td>
</tr>
<tr>
<td>NRD-32LRU‡</td>
<td>380 rpm</td>
<td>1-1/4&quot; 1&quot;</td>
</tr>
</tbody>
</table>

‡ Underwater Motor

### Heavy-Duty Reversible Drills

Heavy-duty reversible drills are preferred for production work as they have absolute smoothness of operation for accurate drilling, reaming, tapping and nutrunning. They possess the lugging power to keep their speed when under a load. Their power and efficiency makes them ideal tools for use in railroad shops, shipyards, tool rooms and all types of construction work. Features ball bearing support for long life. Includes dead handle. Equipped with 3/8" (Safety Lever Throttle) or 1/2" (Self-Closing Roll Throttle) Air Inlet Thread requiring Avg. Air Consumption of 50 cfm. Recommended hose size of 1/2".

- Built-In Lubricator
- Spindle Protection Nut (2M and 3M Spindles only)
- 3 Horse Power, 4" Feed Length

### Example for Ordering

<table>
<thead>
<tr>
<th>MOTOR NO.</th>
<th>SPINDLE FEED OPTION</th>
<th>THROTTLE OPTION</th>
<th>REAR FEED OPTION</th>
<th>MODEL NO. FOR ORDERING</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRD-23R</td>
<td>* Step 1</td>
<td>** Step 4</td>
<td>** Step 4</td>
<td>NRD-23RSCT</td>
</tr>
</tbody>
</table>

*Spindle Feed Option omitted per Option Code 2M exception  **Rear Feed Option omitted per exception

See pages 38-39 & 42 for drill accessories.
Morse Taper Arbors

<table>
<thead>
<tr>
<th>Model</th>
<th>Taper</th>
<th>Drive</th>
</tr>
</thead>
<tbody>
<tr>
<td>A0261</td>
<td>#2 Morse</td>
<td>3/8&quot;-24 Threaded</td>
</tr>
<tr>
<td>A0264</td>
<td>#2 Morse</td>
<td>1/2&quot;-20 Threaded</td>
</tr>
<tr>
<td>A0268</td>
<td>#2 Morse</td>
<td>5/8&quot;-16 Threaded</td>
</tr>
<tr>
<td>R33W-151-0.50</td>
<td>#2 Morse</td>
<td>Woodboring Chuck</td>
</tr>
<tr>
<td>R33SW-151A-0.50</td>
<td>#3 Morse</td>
<td>Woodboring Chuck</td>
</tr>
<tr>
<td>2MTX12SQ</td>
<td>#2 Morse</td>
<td>1/2&quot; Square</td>
</tr>
<tr>
<td>3MTX12SQ</td>
<td>#2 Morse</td>
<td>1/2&quot; Square</td>
</tr>
<tr>
<td>3MTX34SQ</td>
<td>#3 Morse</td>
<td>3/4&quot; Square</td>
</tr>
<tr>
<td>33SH-214</td>
<td>#3 Morse</td>
<td>3/4&quot; Square</td>
</tr>
<tr>
<td>5MTX1SQ</td>
<td>#5 Morse</td>
<td>1&quot; Square</td>
</tr>
</tbody>
</table>

MP-222 Accessories

DE-99C 1/2" Cap. Jacobs Chuck w/K32 Key & Adapter

DE-99C-625 5/8" Cap. Jacobs Chuck w/K3 Key & Adapter

DE-215A 1/2" Sq. Dr. Adapter

DE-215B 5/8" Sq. Dr. Adapter

DE-323A-2 2MT Spindle

DE-323A-3 3MT Spindle

T15-278 Breast Plate Screw

DE-99C-750 3/4" Cap. Jacobs Chuck w/K4 Key & Adapter

Other Manufacturer Accessories

R33H-79 Breast Plate
Fits Ingersoll-Rand 33 Series

T12-347 Chuck Nut
Fits Ingersoll-Rand 551 Series w/ 5MT Spindle

Jacobs® Arbors

Morse taper to Jacobs® taper arbors can be used to adapt any Morse taper drill to accept Jacobs® chucks. These adapters improve drill operation and make drill bit changes quicker.

<table>
<thead>
<tr>
<th>Jacobs® Taper</th>
<th>#1 Morse Taper</th>
<th>#2 Morse Taper</th>
<th>#3 Morse Taper</th>
<th>#4 Morse Taper</th>
<th>#5 Morse Taper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Model</td>
<td>Model</td>
<td>Model</td>
<td>Model</td>
<td>Model</td>
</tr>
<tr>
<td>1JT</td>
<td>A0101</td>
<td>A0201</td>
<td>A0301</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2JT</td>
<td>A0102</td>
<td>A0202</td>
<td>A0302</td>
<td>A0402</td>
<td>A0503</td>
</tr>
<tr>
<td>3JT</td>
<td>-</td>
<td>A0203</td>
<td>A0303</td>
<td>A0403</td>
<td>A0504</td>
</tr>
<tr>
<td>4JT</td>
<td>-</td>
<td>A0204</td>
<td>A0304</td>
<td>A0404</td>
<td>A0505</td>
</tr>
<tr>
<td>5JT</td>
<td>-</td>
<td>-</td>
<td>A0305</td>
<td>A0405</td>
<td>A0506</td>
</tr>
<tr>
<td>6JT</td>
<td>A0106</td>
<td>A0206</td>
<td>A0306</td>
<td>A0406</td>
<td>-</td>
</tr>
<tr>
<td>33JT</td>
<td>A0133</td>
<td>A0233</td>
<td>A0333</td>
<td>A0433</td>
<td>-</td>
</tr>
</tbody>
</table>

See pages 39 & 42 for additional drill accessories.
Nutrunners & Drill Accessories

**Jacobs® Tap Chucks**

Full range of tap chucks for tapping machines and portable tappers.
- Designed for use with Rubber-Flex® collets
- Positive-drive chuck jaws for superior performance
- Simple quarter turn of chuck screw to disengage back jaws

**Tap Chuck Specifications**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Tap Capacity</th>
<th>Mount Style</th>
<th>Overall Length</th>
<th>Maximum Diameter</th>
<th>Round Shank Capacity</th>
<th>Available Rubber-Flex® Collets</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>41-01</td>
<td># 0-1/4&quot;</td>
<td>1JT*</td>
<td>2.00&quot;</td>
<td>0.84&quot;</td>
<td>J116, J117</td>
<td>J116, J117</td>
<td>2 oz</td>
</tr>
<tr>
<td>42-01</td>
<td>#10-5/16&quot;</td>
<td>1JT*</td>
<td>2.50&quot;</td>
<td>0.94&quot;</td>
<td>J420, J421, J422, J423</td>
<td>6 oz</td>
<td></td>
</tr>
<tr>
<td>42-02</td>
<td>#10-5/16&quot;</td>
<td>2 short JT*</td>
<td>2.50&quot;</td>
<td>0.94&quot;</td>
<td>J420, J421, J422, J423</td>
<td>6 oz</td>
<td></td>
</tr>
<tr>
<td>42-24</td>
<td>#10-5/16&quot;</td>
<td>0.3675 Dia.</td>
<td>2.31&quot;</td>
<td>0.94&quot;</td>
<td>J420, J421, J422, J423</td>
<td>6 oz</td>
<td></td>
</tr>
<tr>
<td>42-J8</td>
<td>#0-1/4&quot;</td>
<td>0.375 Sq. Hole</td>
<td>1.06&quot;</td>
<td>0.94&quot;</td>
<td>J420, J421, J422, J423</td>
<td>6 oz</td>
<td></td>
</tr>
<tr>
<td>44-02</td>
<td>5/16-5/8&quot;</td>
<td>2JT*</td>
<td>3.12&quot;</td>
<td>1.47&quot;</td>
<td>J440, J441, J443</td>
<td>12 oz</td>
<td></td>
</tr>
<tr>
<td>44-06</td>
<td>5/16-5/8&quot;</td>
<td>6JT*</td>
<td>3.12&quot;</td>
<td>1.47&quot;</td>
<td>J440, J441, J443</td>
<td>12 oz</td>
<td></td>
</tr>
<tr>
<td>44-J9</td>
<td>#10-1/2&quot;</td>
<td>0.500 Sq. Hole</td>
<td>1.180&quot;</td>
<td>0.50&quot;</td>
<td>J440, J441, J443</td>
<td>12 oz</td>
<td></td>
</tr>
</tbody>
</table>

* Jacobs® Taper
† Rubber-Flex® Collets are not included. Must be ordered separately.

**Jacobs® Rubber-Flex® Collets**

Outperform conventional split-steel collets in gripping power, accuracy and durability.
- Durable one-piece construction
- Precision ground steel jaw inserts assuring maximum grip
- Seals collets and machine spindles to protect from abrasive particles

**Rubber-Flex® Collet Specifications**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Capacity Range (A)</th>
<th>Contact Length (B)</th>
<th>Cone Angle (C)</th>
<th>Outside Diameter (D)</th>
<th>Number of Inserts</th>
</tr>
</thead>
<tbody>
<tr>
<td>J116</td>
<td>0.094&quot; - 1.000&quot;</td>
<td>0.468&quot;</td>
<td>26&quot;</td>
<td>0.590&quot;</td>
<td>6</td>
</tr>
<tr>
<td>J117</td>
<td>0.094&quot; - 1.000&quot;</td>
<td>0.468&quot;</td>
<td>26&quot;</td>
<td>0.590&quot;</td>
<td>8</td>
</tr>
<tr>
<td>J420</td>
<td>0.176&quot; - 0.620&quot;</td>
<td>0.500&quot;</td>
<td>40&quot;</td>
<td>0.941&quot;</td>
<td>6</td>
</tr>
<tr>
<td>J421</td>
<td>0.139&quot; - 0.500&quot;</td>
<td>0.500&quot;</td>
<td>40&quot;</td>
<td>0.941&quot;</td>
<td>6</td>
</tr>
<tr>
<td>J422</td>
<td>0.253&quot; - 0.300&quot;</td>
<td>0.500&quot;</td>
<td>40&quot;</td>
<td>0.941&quot;</td>
<td>6</td>
</tr>
<tr>
<td>J423</td>
<td>0.090&quot; - 0.180&quot;</td>
<td>0.500&quot;</td>
<td>40&quot;</td>
<td>0.860&quot;</td>
<td>6</td>
</tr>
<tr>
<td>J440</td>
<td>0.280&quot; - 0.500&quot;</td>
<td>0.630&quot;</td>
<td>45&quot;</td>
<td>1.296&quot;</td>
<td>6</td>
</tr>
<tr>
<td>J441</td>
<td>0.176&quot; - 0.383&quot;</td>
<td>0.630&quot;</td>
<td>45&quot;</td>
<td>1.296&quot;</td>
<td>6</td>
</tr>
<tr>
<td>J443</td>
<td>0.110&quot; - 0.280&quot;</td>
<td>0.620&quot;</td>
<td>45&quot;</td>
<td>1.180&quot;</td>
<td>4</td>
</tr>
</tbody>
</table>

**Replacement Parts**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>41-01</td>
<td>N410</td>
<td>J116, J117</td>
<td>U400</td>
<td>K400N</td>
<td>K400B</td>
</tr>
<tr>
<td>42-02</td>
<td>N421</td>
<td>J420, J421, J422, J423</td>
<td>U420</td>
<td>K420N</td>
<td>K420B</td>
</tr>
<tr>
<td>42-J8</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>44-02</td>
<td>N441</td>
<td>J440, J441, J443</td>
<td>U440</td>
<td>K440N</td>
<td>K420N</td>
</tr>
<tr>
<td>44-J9</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

### Michigan Pneumatic

**Model MP-9072RT**

Right Angle Rolling Motor

Torque-controlled rolling motor designed for the boiler tube industry. Unique head design features enclosed bearing design for long tool life. Engineered to precisely expand tubes in steam drums, fire tubes, and related boiler equipment. **Features a roll throttle. Includes dead handle. Tube OD capacity: 1-1/2" to 4".**

- Square Drive: 3/4" x 3/4"
- Free Speed: 90 rpm
- Stall Torque: 423 ft-lbs.
- Rec'd Hose Size: 1/2" x 3/8" x 1/2"
- Avg. Air Consumption: 45 cfm

See pages 38 & 42 for additional drill accessories.
Heavy-Duty Drills & Wood Borers

Michigan Pneumatic Model MP-222

Extra Heavy-Duty Drill/Wood Borer

The newest edition to the MPT line of industrial air tools. Ideal for woodboring in marine timbers and railroad repair work. Features include ball bearing support for long life and efficient operation, a graduated roll throttle for speed control, and durable spur gearing. Includes breast plate, dead handle and a built-in lubricator standard. Equipped with 1/2" Air Inlet Thread requiring Average Air Consumption of 50 cfm. Recommended hose size of 1/2"

<table>
<thead>
<tr>
<th>Step 1. Select Motor No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor No.</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>MP-222J</td>
</tr>
<tr>
<td>MP-222K</td>
</tr>
<tr>
<td>MP-222M</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 2. Select Spindle Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option Code</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>WA1</td>
</tr>
</tbody>
</table>

Example for Ordering

<table>
<thead>
<tr>
<th>MOTOR NO.</th>
<th>SPINDLE FEED OPTION</th>
<th>MODEL NO. FOR ORDERING</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-222K</td>
<td>WA1</td>
<td>MP-222KWA1</td>
</tr>
</tbody>
</table>

Michigan Pneumatic Model MP-33W

Wood Borer - Reversible

Designed for heavy-duty woodworking. Preferred for wood boring as the operator can easily control the power and speed by the throttle. Powerful, lightweight and easy to handle. Ideal for all types of wood boring, construction work, railroads, shipyards and wharf and pier construction. Uses Ingersoll-Rand 33W wood borer parts.

Example Specifications:
- Capacity: 2"
- Length: 17-5/8"
- Free Speed: 800 rpm
- Weight: 28.75 lbs.
- Morse Taper: #2
- Air Inlet Thread: 1/2"
- Maximum HP: 3.00
- Spindle Offset: 1-7/8"

See pages 38-39 & 42 for drill accessories.
## Heavy-Duty Corner Drills

### Michigan Pneumatic  Model MP-L-257

**Corner Drill - Non-Reversible**

Compact, rugged, powerful design for heavy-duty use in cramped areas. Features positive starting control and sensitive speed variation. Will handle various drilling, reaming and tapping applications. Ideal for assembly plants, refineries and railroad shops. *Other models available with #4 M.T. Uses Thor L-257 corner drill parts. Includes ratchet wrench.*

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>29/32&quot; Drilling</td>
</tr>
<tr>
<td>Free Speed</td>
<td>320 rpm</td>
</tr>
<tr>
<td>Morse Taper</td>
<td>#2</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>1.40</td>
</tr>
<tr>
<td>Weight</td>
<td>14.125 lbs.</td>
</tr>
<tr>
<td>Height of Spindle</td>
<td>5-7/8&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>19-1/2&quot;</td>
</tr>
<tr>
<td>Spindle Offset</td>
<td>1-1/4&quot;</td>
</tr>
</tbody>
</table>

### Michigan Pneumatic  Model MP-323-3

**Corner Drill - Non-Reversible**

Designed for heavy-duty use in cramped areas. Features extra heavy-duty grease packed gearing, hardened ground motor liners, a teasing throttle, feed screws and a governor controlled motor. *Includes ratchet wrench.*

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>1&quot; Drilling</td>
</tr>
<tr>
<td>Free Speed</td>
<td>175 rpm</td>
</tr>
<tr>
<td>Morse Taper</td>
<td>#3</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>1.50</td>
</tr>
<tr>
<td>Weight</td>
<td>21.5 lbs.</td>
</tr>
<tr>
<td>Height of Spindle</td>
<td>8-1/2&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>26-1/8&quot;</td>
</tr>
<tr>
<td>Spindle Offset</td>
<td>1-7/16&quot;</td>
</tr>
</tbody>
</table>

### Michigan Pneumatic  Model MP-30

**Corner Drill - Non-Reversible**

Strong, powerful close quarters drill built to withstand heavy-duty drilling, reaming and tapping where space is limited. Particularly useful in machine shops, power plants and railroad shops. *Model MP-40 also available with #4 M.T. Uses Ingersoll-Rand 30 corner drill parts. Includes ratchet wrench.*

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>1-1/4&quot; Drilling</td>
</tr>
<tr>
<td>Free Speed</td>
<td>185 rpm</td>
</tr>
<tr>
<td>Morse Taper</td>
<td>#3</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>2.80</td>
</tr>
<tr>
<td>Height of Spindle</td>
<td>8-3/4&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>25-1/4&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>33 lbs.</td>
</tr>
<tr>
<td>Spindle Offset</td>
<td>1-3/8&quot;</td>
</tr>
</tbody>
</table>

### Michigan Pneumatic  Model MP-2-1801-0030

**Corner Drill - Non-Reversible**

Applications include heavy-duty drilling, reaming and tapping for railroad cars, refineries, shipyards, structural steel fabrication and wood product industries. Features small side-to-side distance for working in tight spaces, self-closing roll throttle, feed screw and built-in motor oiler.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>1-1/4&quot; Drilling</td>
</tr>
<tr>
<td>Load Speed</td>
<td>260 rpm</td>
</tr>
<tr>
<td>Morse Taper</td>
<td>#3</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>2.60</td>
</tr>
<tr>
<td>Height of Spindle</td>
<td>7.5&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>22-1/2&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>25 lbs.</td>
</tr>
<tr>
<td>Spindle Offset</td>
<td>1.4&quot;</td>
</tr>
</tbody>
</table>

### Michigan Pneumatic  Model MP-2-2104-0030

**Corner Drill - Reversible**

Applications include heavy-duty drilling, reaming and tapping for railroad cars, refineries, shipyards, structural steel fabrication and wood product industries. Features small side-to-side distance for working in tight spaces, self-closing roll throttle, feed screw and built-in motor oiler.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>2-1/8&quot; Drilling</td>
</tr>
<tr>
<td>Load Speed</td>
<td>180 rpm</td>
</tr>
<tr>
<td>Morse Taper</td>
<td>#4</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>3.00</td>
</tr>
<tr>
<td>Height of Spindle</td>
<td>10&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>23.8&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>37 lbs.</td>
</tr>
<tr>
<td>Spindle Offset</td>
<td>1.6&quot;</td>
</tr>
</tbody>
</table>

See pages 38-39 & 42 for drill accessories.
### Jacobs® Multi-Craft® Duty Chucks

<table>
<thead>
<tr>
<th>Jacobs Model</th>
<th>MPT Model</th>
<th>Capacity (min. - max.)</th>
<th>Threaded Mount</th>
<th>Uses Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM1G61-T1</td>
<td>SM1G61-T1</td>
<td>0.028 - 0.250&quot;</td>
<td>3/8&quot;-24</td>
<td>KG1</td>
</tr>
<tr>
<td>DC4G61-T1</td>
<td>DC4G61-T1</td>
<td>0.063 - 0.375&quot;</td>
<td>3/8&quot;-24</td>
<td>KG1</td>
</tr>
<tr>
<td>DC4G61-T2</td>
<td>DC4G61-T2</td>
<td>0.063 - 0.375&quot;</td>
<td>3/8&quot;-24</td>
<td>KG1</td>
</tr>
<tr>
<td>SM4G61-T1</td>
<td>SM4G61-T1</td>
<td>0.078 - 0.500&quot;</td>
<td>3/8&quot;-24</td>
<td>KK</td>
</tr>
<tr>
<td>SM4G61-T2</td>
<td>SM4G61-T2</td>
<td>0.078 - 0.500&quot;</td>
<td>3/8&quot;-24</td>
<td>KK</td>
</tr>
</tbody>
</table>

### Jacobs® HAND-TITE® Keyless Chuck

<table>
<thead>
<tr>
<th>Jacobs Model</th>
<th>MPT Model</th>
<th>Capacity (min. - max.)</th>
<th>Threaded Mount</th>
<th>Sleeve Type</th>
<th>Uses Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>31451</td>
<td>31451</td>
<td>0.032 - 0.375&quot;</td>
<td>3/8&quot;-24</td>
<td>2 pc</td>
<td></td>
</tr>
<tr>
<td>31708-3/8</td>
<td>31708-3/8</td>
<td>0.032 - 0.375&quot;</td>
<td>1/2&quot;-20</td>
<td>2 pc</td>
<td></td>
</tr>
<tr>
<td>31708</td>
<td>31708</td>
<td>0.062 - 0.500&quot;</td>
<td>3/8&quot;-24</td>
<td>2 pc</td>
<td></td>
</tr>
<tr>
<td>31403</td>
<td>31403</td>
<td>0.062 - 0.500&quot;</td>
<td>1/2&quot;-20</td>
<td>2 pc</td>
<td></td>
</tr>
<tr>
<td>31731-3/8</td>
<td>31731-3/8</td>
<td>0.062 - 0.500&quot;</td>
<td>1/2&quot;-20</td>
<td>2 pc</td>
<td></td>
</tr>
</tbody>
</table>

### Jacobs® Plain Bearing Drill Chucks

#### Thread Mounted Light-Duty Industrial Model

<table>
<thead>
<tr>
<th>Jacobs Model</th>
<th>MPT Model</th>
<th>Capacity (min. - max.)</th>
<th>Threaded Mount</th>
<th>Uses Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>22BA-3/8</td>
<td>22BA-0.375</td>
<td>0.063 - 0.375&quot;</td>
<td>3/8&quot;-24</td>
<td>KK</td>
</tr>
<tr>
<td>26BA-3/8</td>
<td>26BA-0.375</td>
<td>0.063 - 0.375&quot;</td>
<td>3/8&quot;-24</td>
<td>KK</td>
</tr>
</tbody>
</table>

#### Thread Mounted Medium-Duty Model

<table>
<thead>
<tr>
<th>Jacobs Model</th>
<th>MPT Model</th>
<th>Capacity (min. - max.)</th>
<th>Threaded Mount</th>
<th>Uses Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>0B-5/16</td>
<td>0B-0.312</td>
<td>0.0135 - 0.156&quot;</td>
<td>5/16&quot;-24</td>
<td>K0</td>
</tr>
<tr>
<td>1B3-3/8</td>
<td>1B3-0.375</td>
<td>0.040 - 0.250&quot;</td>
<td>3/8&quot;-24</td>
<td>K1</td>
</tr>
<tr>
<td>2B3-3/8</td>
<td>2B3-0.375</td>
<td>0.040 - 0.375&quot;</td>
<td>3/8&quot;-24</td>
<td>K2</td>
</tr>
<tr>
<td>3B3-3/8</td>
<td>3B3-0.375</td>
<td>0.063 - 0.375&quot;</td>
<td>3/8&quot;-24</td>
<td>K3</td>
</tr>
<tr>
<td>41B3-3/8</td>
<td>41B3-0.375</td>
<td>0.040 - 0.375&quot;</td>
<td>3/8&quot;-24</td>
<td>K30</td>
</tr>
<tr>
<td>41B3-3/8S</td>
<td>41B3-0.37S</td>
<td>0.040 - 0.375&quot;</td>
<td>3/8&quot;-24</td>
<td>K30</td>
</tr>
<tr>
<td>41B3-1/2</td>
<td>41B3-0.500</td>
<td>0.040 - 0.375&quot;</td>
<td>1/2&quot;-20</td>
<td>K30</td>
</tr>
<tr>
<td>33B3-3/8</td>
<td>33B3-0.375</td>
<td>0.078 - 0.500&quot;</td>
<td>5/8&quot;-16</td>
<td>K32</td>
</tr>
<tr>
<td>33B3-1/2</td>
<td>33B3-0.500</td>
<td>0.156 - 0.625&quot;</td>
<td>1/2&quot;-20</td>
<td>K3</td>
</tr>
<tr>
<td>33B3-5/8</td>
<td>33B3-0.625</td>
<td>0.156 - 0.625&quot;</td>
<td>5/8&quot;-16</td>
<td>K3</td>
</tr>
</tbody>
</table>

#### Thread Mounted Heavy-Duty Model

<table>
<thead>
<tr>
<th>Jacobs Model</th>
<th>MPT Model</th>
<th>Capacity (min. - max.)</th>
<th>Taper Mount</th>
<th>Uses Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>34-02</td>
<td>34-02</td>
<td>0.040 - 0.500&quot;</td>
<td>3/4&quot;-16</td>
<td>K3</td>
</tr>
<tr>
<td>34-06</td>
<td>34-06</td>
<td>0.040 - 0.500&quot;</td>
<td>3/4&quot;-16</td>
<td>K3</td>
</tr>
<tr>
<td>34-33</td>
<td>34-33</td>
<td>0.040 - 0.500&quot;</td>
<td>3/4&quot;-16</td>
<td>K3</td>
</tr>
<tr>
<td>34-33C*</td>
<td>34-33C*</td>
<td>0.040 - 0.500&quot;</td>
<td>3/4&quot;-16</td>
<td>K3</td>
</tr>
<tr>
<td>3A</td>
<td>3A</td>
<td>0.125 - 0.625&quot;</td>
<td>3/4&quot;-16</td>
<td>K3</td>
</tr>
<tr>
<td>36</td>
<td>36</td>
<td>0.180 - 0.800&quot;</td>
<td>3/4&quot;-16</td>
<td>K4</td>
</tr>
</tbody>
</table>

### Jacobs® Ball Bearing Super-Duty Chucks

Super ball bearing chucks are the world’s most accurate chucks designed for extra heavy-duty drilling. Ideal for close tolerance production drilling on precision equipment.

<table>
<thead>
<tr>
<th>Jacobs Model</th>
<th>MPT Model</th>
<th>Capacity (min. - max.)</th>
<th>Taper Mount</th>
<th>Uses Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-1/2N</td>
<td>8-0.500N</td>
<td>0.040 - 0.250&quot;</td>
<td>3/8&quot;-24</td>
<td>K3</td>
</tr>
<tr>
<td>11N</td>
<td>11N</td>
<td>0.040 - 0.250&quot;</td>
<td>3/8&quot;-24</td>
<td>K3</td>
</tr>
<tr>
<td>14N</td>
<td>14N</td>
<td>0.040 - 0.250&quot;</td>
<td>3/8&quot;-24</td>
<td>K3</td>
</tr>
<tr>
<td>16N</td>
<td>16N</td>
<td>0.125 - 0.625&quot;</td>
<td>3/8&quot;-24</td>
<td>K4</td>
</tr>
<tr>
<td>18N</td>
<td>18N</td>
<td>0.125 - 0.750&quot;</td>
<td>3/8&quot;-24</td>
<td>K4</td>
</tr>
<tr>
<td>20N</td>
<td>20N</td>
<td>0.375 - 1.000&quot;</td>
<td>3/8&quot;-24</td>
<td>K5</td>
</tr>
</tbody>
</table>

### Jacobs® Screwdriver Bit Adapters - Quick Change

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Shank Size</th>
<th>Threaded Mount</th>
</tr>
</thead>
<tbody>
<tr>
<td>QC-50</td>
<td>1/4&quot; hex</td>
<td>3/8&quot;-24</td>
</tr>
<tr>
<td>QC-51</td>
<td>7/16&quot; hex</td>
<td>3/8&quot;-24</td>
</tr>
</tbody>
</table>

See pages 38-39 for additional drill accessories. Stainless steel chucks available in some sizes.
Magnetic Drill

The MDM-40 features a compact 13" height for drilling in tight spaces and automatic lubrication. A 4-speed gearbox and automatic lubrication are standard on the ECO-80AK. Other magnetic drills are available in either air or electric versions. See below for annular cutters.

<table>
<thead>
<tr>
<th>Model</th>
<th>MDM-40</th>
<th>ECO-80AK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cutter Capacity</td>
<td>1-1/2&quot;</td>
<td>3-3/16&quot;</td>
</tr>
<tr>
<td>Twist Drill Capacity</td>
<td>-</td>
<td>1-1/4&quot;</td>
</tr>
<tr>
<td>No Load Speed</td>
<td>440 rpm</td>
<td>100/175/245/385 rpm</td>
</tr>
<tr>
<td>Arbor Bore</td>
<td>3/4&quot;</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>Stroke</td>
<td>4-3/8&quot;</td>
<td>10&quot;</td>
</tr>
<tr>
<td>Motor Power</td>
<td>9.5 amp/110V</td>
<td>15 amp/110V</td>
</tr>
<tr>
<td>Magnetic Force (1&quot; plate)</td>
<td>2640 lbs.</td>
<td>7040 lbs.</td>
</tr>
<tr>
<td>Dimensions</td>
<td>6-1/2&quot; L x 3-1/4&quot; W</td>
<td>9&quot; L x 4-3/8&quot; W</td>
</tr>
<tr>
<td>Weight</td>
<td>24 lbs.</td>
<td>57 lbs.</td>
</tr>
</tbody>
</table>

Annular Cutters

Armor-Plated Unibroach™ Cutters are for use with Hougen, Jancy and other magnetic drilling machines with 3/4" arbor collets. More cutting teeth reduces the individual tooth loading, which extends tool life before resharpening and makes for easier, more efficient cutting of tough materials.

<table>
<thead>
<tr>
<th>Hole Diameter</th>
<th>Decimal Equivalent</th>
<th>Armor-Plated Titanium Aluminum Nitride (coated TiAlN)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>For 1&quot; Thick Materials</td>
</tr>
<tr>
<td>7/16&quot;</td>
<td>0.4375&quot;</td>
<td>81114T</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>0.5000&quot;</td>
<td>81116T</td>
</tr>
<tr>
<td>9/16&quot;</td>
<td>0.5625&quot;</td>
<td>81118T</td>
</tr>
<tr>
<td>5/8&quot;</td>
<td>0.6250&quot;</td>
<td>81120T</td>
</tr>
<tr>
<td>11/16&quot;</td>
<td>0.6875&quot;</td>
<td>81122T</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>0.7500&quot;</td>
<td>81124T</td>
</tr>
<tr>
<td>13/16&quot;</td>
<td>0.8125&quot;</td>
<td>81126T</td>
</tr>
<tr>
<td>7/8&quot;</td>
<td>0.8750&quot;</td>
<td>81128T</td>
</tr>
<tr>
<td>15/16&quot;</td>
<td>0.9375&quot;</td>
<td>81130T</td>
</tr>
<tr>
<td>1&quot;</td>
<td>1.0000&quot;</td>
<td>81132T</td>
</tr>
<tr>
<td>1-1/16&quot;</td>
<td>1.0625&quot;</td>
<td>81134T</td>
</tr>
<tr>
<td>1-1/8&quot;</td>
<td>1.1250&quot;</td>
<td>81136T</td>
</tr>
<tr>
<td>1-3/16&quot;</td>
<td>1.1875&quot;</td>
<td>81138T</td>
</tr>
<tr>
<td>1-1/4&quot;</td>
<td>1.2500&quot;</td>
<td>81140T</td>
</tr>
<tr>
<td>1-5/16&quot;</td>
<td>1.3125&quot;</td>
<td>81142T</td>
</tr>
<tr>
<td>1-3/8&quot;</td>
<td>1.3750&quot;</td>
<td>81144T</td>
</tr>
<tr>
<td>1-7/16&quot;</td>
<td>1.4375&quot;</td>
<td>81146T</td>
</tr>
<tr>
<td>1-1/2&quot;</td>
<td>1.5000&quot;</td>
<td>81148T</td>
</tr>
<tr>
<td>1-9/16&quot;</td>
<td>1.5625&quot;</td>
<td>81150T</td>
</tr>
<tr>
<td>1-5/8&quot;</td>
<td>1.6250&quot;</td>
<td>81152T</td>
</tr>
<tr>
<td>1-11/16&quot;</td>
<td>1.6875&quot;</td>
<td>81154T</td>
</tr>
<tr>
<td>1-3/4&quot;</td>
<td>1.7500&quot;</td>
<td>81156T</td>
</tr>
<tr>
<td>1-13/16&quot;</td>
<td>1.8125&quot;</td>
<td>81158T</td>
</tr>
<tr>
<td>1-7/8&quot;</td>
<td>1.8750&quot;</td>
<td>81160T</td>
</tr>
<tr>
<td>1-15/16&quot;</td>
<td>1.9375&quot;</td>
<td>81162T</td>
</tr>
<tr>
<td>2&quot;</td>
<td>2.0000&quot;</td>
<td>81164T</td>
</tr>
<tr>
<td>2-1/16&quot;</td>
<td>2.0625&quot;</td>
<td>81166T</td>
</tr>
</tbody>
</table>

Pilots, Arbors & Countersinks

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>73102</td>
<td>Pilot, 1&quot; depth cutter</td>
</tr>
<tr>
<td>73202</td>
<td>Pilot, 2&quot; depth cutter</td>
</tr>
<tr>
<td>83302</td>
<td>Pilot, 3&quot; depth cutter</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>73902</td>
<td>No. 2 Morse Taper Arbor</td>
</tr>
<tr>
<td>73903</td>
<td>No. 3 Morse Taper Arbor</td>
</tr>
<tr>
<td>73904</td>
<td>No. 4 Morse Taper Arbor</td>
</tr>
<tr>
<td>73910</td>
<td>Countersink, up to 2&quot; hole</td>
</tr>
</tbody>
</table>
**Disc Sanders**

**Nippon Pneumatic  Model NSG-50A  Model NSG-100**

**High-Speed Sander**
Compact, perfectly balanced sanders for fine detail applications.

<table>
<thead>
<tr>
<th>Model</th>
<th>NSG-50A</th>
<th>NSG-100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>2-1/4&quot;</td>
<td>4&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>15000 rpm</td>
<td>13000 rpm</td>
</tr>
<tr>
<td>Length</td>
<td>6-3/8&quot;</td>
<td>6-3/16&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>1.5 lbs.</td>
<td>2.0 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>9.2 cfm</td>
<td>14.1 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic  Model MP-2000X-F**

**High-Speed Sander**
Lightweight tool is perfect for finishing flat or contoured surfaces, touch-up, feather-edging and production sanding. Rugged construction for years of carefree service. **Equipped with 3", 4-1/2", 5-1/2" fiber pads.**

<table>
<thead>
<tr>
<th>Model</th>
<th>3&quot; Fiber Pad</th>
<th>4-1/2&quot; Fiber Pad</th>
<th>5-1/2&quot; Fiber Pad</th>
<th>Disc Nut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>5&quot;</td>
<td>5&quot;</td>
<td>5&quot;</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>1.75 lbs.</td>
<td>2.25 lbs.</td>
<td>3.0 lbs.</td>
<td>3.625 lbs.</td>
</tr>
<tr>
<td>Free Speed</td>
<td>20000 rpm</td>
<td>18000 rpm</td>
<td>13000 rpm</td>
<td></td>
</tr>
<tr>
<td>Length</td>
<td>8&quot;</td>
<td>8-1/2&quot;</td>
<td>6-3/8&quot;</td>
<td>8&quot;</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td></td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>4 cfm</td>
<td>4 cfm</td>
<td>9.2 cfm</td>
<td></td>
</tr>
</tbody>
</table>

**Michigan Pneumatic  Model MP-727-ST**

**High-Speed Sander**
Designed for finishing flat or contoured surfaces. Ideal for touch-up, feather-edging and production sanding.

<table>
<thead>
<tr>
<th>Model</th>
<th>3&quot; Fiber Pad</th>
<th>4-1/2&quot; Fiber Pad</th>
<th>5-1/2&quot; Fiber Pad</th>
<th>Disc Nut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>5&quot;</td>
<td>5&quot;</td>
<td>5&quot;</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>1.5 lbs.</td>
<td>2.25 lbs.</td>
<td>3.0 lbs.</td>
<td>3.625 lbs.</td>
</tr>
<tr>
<td>Free Speed</td>
<td>15000 rpm</td>
<td>13000 rpm</td>
<td>10000 rpm</td>
<td></td>
</tr>
<tr>
<td>Length</td>
<td>8-1/4&quot;</td>
<td>8-1/2&quot;</td>
<td>6-3/8&quot;</td>
<td>8-1/4&quot;</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td></td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>4 cfm</td>
<td>4 cfm</td>
<td>9.2 cfm</td>
<td></td>
</tr>
</tbody>
</table>

**Michigan Pneumatic  Model MP-3814-DD**

**High-Speed Sander**
See-through sander used in automotive repair shops when better visibility is required. Backing pad doubles as cooling system for sanding disc. Lightweight to reduce operator fatigue.

<table>
<thead>
<tr>
<th>Model</th>
<th>Backing Pad</th>
<th>36 Grit Sand Paper</th>
<th>60 Grit Sand Paper</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC-3812P</td>
<td>4&quot; Felt Pad</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC-3812A</td>
<td>36 Grit Sand Paper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC-3812B</td>
<td>60 Grit Sand Paper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capacity</td>
<td>5&quot;</td>
<td>4&quot; or 5&quot;</td>
<td>4&quot; or 5&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>6000 rpm</td>
<td>12000 rpm</td>
<td>12000 rpm</td>
</tr>
<tr>
<td>Length</td>
<td>8-1/4&quot;</td>
<td>8-1/4&quot;</td>
<td>8-1/4&quot;</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>5 cfm</td>
<td>4 cfm</td>
<td>4 cfm</td>
</tr>
</tbody>
</table>

**National Detroit  Model DCQ**

**Disc Action Sander**
Designed to speed production on light grinding and sanding to remove heavy grinder swirls. **Lower noise level, OSHA approved. Additional 4" and 5" pads also available. Please specify pad size.**

<table>
<thead>
<tr>
<th>Model</th>
<th>4&quot; Felt Pad</th>
<th>5&quot; Felt Pad</th>
</tr>
</thead>
<tbody>
<tr>
<td>3021FP</td>
<td>4&quot; Felt Pad</td>
<td></td>
</tr>
<tr>
<td>3055</td>
<td>5&quot; Felt Pad</td>
<td></td>
</tr>
<tr>
<td>Capacity</td>
<td>4&quot; or 5&quot;</td>
<td>4&quot; or 5&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>12000 rpm</td>
<td>12000 rpm</td>
</tr>
<tr>
<td>Length</td>
<td>8&quot;</td>
<td>8&quot;</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>4 cfm</td>
<td>4 cfm</td>
</tr>
</tbody>
</table>
**Random Orbital Sanders**

**Michigan Pneumatic Model MP-DA6-ST**
**Random Orbital Sander**
Ball bearing construction, balanced counterweights and a built-in speed regulator make this sander ideal for metal preparation.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP-005</td>
<td>6&quot; Vinyl Pad</td>
</tr>
<tr>
<td>B-6201ZZ</td>
<td>Pad Bearing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>6&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>6000 rpm</td>
</tr>
<tr>
<td>Length</td>
<td>8-1/4&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>4 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>11 cfm</td>
</tr>
</tbody>
</table>

**National Detroit Model DA**
**Dual Action Sander**
Proven orbital action sander provides a smoother, scratch-free finish as the abrasives travel in a non-repeating path, reducing heat generation. Lightweight with built-in regulator. **Additional 3", 5" and 6" pads also available. Please specify pad size.**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4062-3</td>
<td>3&quot; Vinyl Pad</td>
</tr>
<tr>
<td>4062-5</td>
<td>5&quot; Vinyl Pad</td>
</tr>
<tr>
<td>4062-6</td>
<td>6&quot; Vinyl Pad</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>3&quot;, 5&quot; or 6&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>6000 rpm</td>
</tr>
<tr>
<td>Length</td>
<td>8-1/4&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>4.125 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>11 cfm</td>
</tr>
</tbody>
</table>

**National Detroit Model DA-DE**
**Dual Action Sander**
Proven orbital action sander provides a smoother, scratch-free finish as the abrasives travel in a non-repeating path, reducing heat generation. Lightweight with built-in regulator. **Additional 5" and 6" pads also available. Please specify pad size.**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4162-5</td>
<td>5&quot; Vinyl Pad with Dust Extraction Holes</td>
</tr>
<tr>
<td>4162-6</td>
<td>6&quot; Vinyl Pad with Dust Extraction Holes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>5&quot; or 6&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>6000 rpm</td>
</tr>
<tr>
<td>Length</td>
<td>8-1/4&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>4.125 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>11 cfm</td>
</tr>
</tbody>
</table>

**National Detroit Model DAQ**
**Dual Action Sander**
Proven orbital action sander provides a smoother, scratch-free finish as the abrasives travel in a non-repeating path, reducing heat generation. Lightweight with built-in regulator. **Lower noise level, OSHA approved Additional 3", 5" and 6" pads also available. Please specify pad size.**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4062-3</td>
<td>3&quot; Vinyl Pad</td>
</tr>
<tr>
<td>4062-5</td>
<td>5&quot; Vinyl Pad</td>
</tr>
<tr>
<td>4062-6</td>
<td>6&quot; Vinyl Pad</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>3&quot;, 5&quot; or 6&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>6000 rpm</td>
</tr>
<tr>
<td>Length</td>
<td>8-1/4&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>4.125 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>11 cfm</td>
</tr>
</tbody>
</table>

**National Detroit Model EZQ**
**Dual Action Sander**
Combines dual action sanding with features allowing the pad to operate flat on work surfaces. Exceptionally smooth operation for controlled stock removal. **Model EZQ-6DE with dust extraction system available. Additional 3", 4", 5" and 6" pads also available. Please specify pad size.**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4062-3</td>
<td>3&quot; Vinyl Pad</td>
</tr>
<tr>
<td>4862-5</td>
<td>5&quot; Vinyl Pad</td>
</tr>
<tr>
<td>4062-4</td>
<td>4&quot; Vinyl Pad</td>
</tr>
<tr>
<td>4862-6</td>
<td>6&quot; Vinyl Pad</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>3&quot;, 4&quot;, 5&quot; or 6&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>10000 rpm</td>
</tr>
<tr>
<td>Length</td>
<td>9-3/8&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>3.6 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>11 cfm</td>
</tr>
</tbody>
</table>
Michigan Pneumatic  Model MP-844-ST

Palm Sander - with Vacuum Pickup

Palm type sander features dust-free sanding for a cleaner work environment. Orbital action provides a smoother, finer finish for better results. Powerful, compact, lightweight, with low vibration action for operator comfort and higher productivity. Built-in adjustable speed regulator for versatility.

60334-6  6" Vinyl Pad with Dust Extraction Holes

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Weight</th>
<th>Free Speed</th>
<th>Air Inlet Thread</th>
<th>Height</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>6&quot;</td>
<td>3 lbs.</td>
<td>10000 rpm</td>
<td>1/4&quot;</td>
<td>4&quot;</td>
<td>6 cfm</td>
</tr>
</tbody>
</table>

Michigan Pneumatic  Model MP-3368-DD

Palm Sander

Powerful palm sander designed to reduce heat generation on application material. Lightweight with built-in regulator.

4862-6  6" Vinyl Pad

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Weight</th>
<th>Free Speed</th>
<th>Air Inlet Thread</th>
<th>Height</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>6&quot;</td>
<td>1.56 lbs.</td>
<td>12000 rpm</td>
<td>1/4&quot;</td>
<td>3-3/8&quot;</td>
<td>11 cfm</td>
</tr>
</tbody>
</table>

National Detroit  Model PGU-DE

Palm Sander - with Vacuum Pickup

Lightweight, powerful, quiet and rugged. Features integral dust extraction system, proven bearing design and interchangeable pads to fit any sanding application. **Model PGU without dust extraction system available.** Additional pads available. Please specify pad size.

4862-5  5" Vinyl Pad  4162-5  5" Vinyl Pad w/Dust Extraction Holes
4862-6  6" Vinyl Pad  4162-6  6" Vinyl Pad w/Dust Extraction Holes

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Weight</th>
<th>Free Speed</th>
<th>Air Inlet Thread</th>
<th>Height</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>5&quot; or 6&quot;</td>
<td>2.1 lbs.</td>
<td>12000 rpm</td>
<td>1/4&quot;</td>
<td>4-1/2&quot;</td>
<td>11 cfm</td>
</tr>
</tbody>
</table>

National Detroit  Model PGSS

Palm Sander

Random orbital sander designed for fine finish work. Ideal for sanding clear coat and lacquers. **Additional 3", 5" and 6" pads also available. Please specify pad size.** Model PGSS-DE with dust extraction system available.

4862-3  3" Vinyl Pad  4162-5  5" Vinyl Pad w/Dust Extraction Holes
4862-5  5" Vinyl Pad  4162-6  6" Vinyl Pad w/Dust Extraction Holes
4862-6  6" Vinyl Pad

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Weight</th>
<th>Free Speed</th>
<th>Air Inlet Thread</th>
<th>Height</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>3&quot;, 5&quot; or 6&quot;</td>
<td>2.1 lbs.</td>
<td>12000 rpm</td>
<td>1/4&quot;</td>
<td>4-3/4&quot;</td>
<td>11 cfm</td>
</tr>
</tbody>
</table>

National Detroit  Model PG-8

Palm Sander

One hand sander allows for better control on flat surfaces. Reduces “scallops” on wood and fiberglass due to uneven pressure applied to the tool. Heavy-duty construction for durability. **Model PG-8DE with dust extraction system available.**

4180  8" Vinyl Pad w/Dust Extraction Holes

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Weight</th>
<th>Free Speed</th>
<th>Air Inlet Thread</th>
<th>Height</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>8&quot;</td>
<td>3.1 lbs.</td>
<td>8000 rpm</td>
<td>1/4&quot;</td>
<td>5&quot;</td>
<td>12 cfm</td>
</tr>
</tbody>
</table>
## Gear Driven Sanders & Buffers

### National Detroit Model 9600

**Geared Sander**

Capable of rough knock-down or fine feather edging. The driven gear “floats” on a cushioned mounting, providing smoother control with the power of a gear driven design. **Model 9600DE with dust extraction system available.** Additional 5” and 6” pads also available. Please specify pad size.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Weight</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>9450-5</td>
<td>5” Vinyl Pad</td>
<td>4.5 lbs</td>
<td>1/4”</td>
<td>14 cfm</td>
</tr>
<tr>
<td>9460-6</td>
<td>6” Vinyl Pad</td>
<td>4.75 lbs</td>
<td>1/4”</td>
<td>14 cfm</td>
</tr>
</tbody>
</table>

### National Detroit Model 9900

**Geared Buffer/Sander**

Lightweight buffer/sander removes paint up to 3.5 times faster than other Sanders. T-handle motor cover and soft grip handle provide ergonomic comfort.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Weight</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>9591</td>
<td>6” Buffering Pad</td>
<td>4.7 lbs</td>
<td>1/4”</td>
<td>14 cfm</td>
</tr>
<tr>
<td>9980</td>
<td>6” Vinyl Pad</td>
<td>5 lbs</td>
<td>1/4”</td>
<td>14 cfm</td>
</tr>
</tbody>
</table>

### National Detroit Model 9900DE

**Geared Buffer/Sander**

Lightweight buffer/sander removes paint up to 3.5 times faster than other Sanders. T-handle motor cover and soft grip handle provide ergonomic comfort.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Weight</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>9591</td>
<td>6” Buffering Pad</td>
<td>4.7 lbs</td>
<td>1/4”</td>
<td>14 cfm</td>
</tr>
<tr>
<td>9980</td>
<td>6” Vinyl Pad</td>
<td>5 lbs</td>
<td>1/4”</td>
<td>14 cfm</td>
</tr>
</tbody>
</table>

### National Detroit Model 900

**8” Geared Sander**


<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Weight</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>4080VP</td>
<td>8” Vinyl Pad</td>
<td>4.75 lbs</td>
<td>1/4”</td>
<td>14 cfm</td>
</tr>
</tbody>
</table>

### National Detroit Model 900DE

**8” Geared Sander**


<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Weight</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>4088</td>
<td>8” Vinyl Pad with Dust Extraction Holes</td>
<td>5 lbs</td>
<td>1/4”</td>
<td>14 cfm</td>
</tr>
</tbody>
</table>
Michigan Pneumatic  Model MP-1265-ST

**Vertical Sander**

Features extra-heavy gearing for heavy-duty operation. Compact and lightweight design for hard to reach spots and reduced operator fatigue. Adjustable speed control allows delicate feather-edging to full speed sanding.

829040  Pad Nut  731247  Pad

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Height</th>
<th>Weight</th>
<th>Air Inlet Thread</th>
</tr>
</thead>
<tbody>
<tr>
<td>7&quot;</td>
<td>7-1/2&quot;</td>
<td>4.5 lbs.</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>4000 rpm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spindle Thread</td>
<td>5/8&quot;-11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum HP</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>9 cfm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Michigan Pneumatic  Model MP-B332

**Vertical Sander - with Rubber Pad**

Heavy-duty tool for steady production. May be used for disc sanding, cup wire brushing and cup wheel grinding. Ideal for cutting high spots and smoothing flat surfaces. Please specify lever or butterfly throttle. Model MP-B332WW with wire wheel available.

R700-R  7" Rubber Backing Pad

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Length</th>
<th>Height</th>
<th>Weight</th>
<th>Air Inlet Thread</th>
</tr>
</thead>
<tbody>
<tr>
<td>7&quot; Pad</td>
<td>8-3/4&quot;</td>
<td>7-5/8&quot;</td>
<td>7.3 lbs.</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>6000 rpm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spindle Thread</td>
<td>5/8&quot;-11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum HP</td>
<td>1.20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>9 cfm</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

National Detroit  Model XLB

**Buffer/Sander**

Excels at both sanding and buffing. Double row head bearing design for long life. Features foam grip and T-handle for operator comfort. Additional 3", 5" and 6" pads also available. Please specify pad size.

4862-3  3" Vinyl Pad  4862-5  5" Vinyl Pad  4862-6  6" Vinyl Pad

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Weight</th>
<th>Air Inlet Thread</th>
</tr>
</thead>
<tbody>
<tr>
<td>3&quot;, 5&quot; or 6&quot;</td>
<td>3.3 lbs.</td>
<td></td>
</tr>
<tr>
<td>Free Speed</td>
<td>10000 rpm</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Abrasive Area</td>
<td>28 sq. in.</td>
<td></td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>13 cfm</td>
<td></td>
</tr>
</tbody>
</table>

Michigan Pneumatic  Model MP-6902K7-ST

**Stripping Tool Kit**

Versatile tool used in the automotive industry. Excellent for cleaning welds, adhesives and rust off work surface.

SM-6902  Utility In-Line Driver  0511  11mm Brush (Fine)
SA-6902RW  Rubber Eraser  0711  11mm Brush (Coarse)
SA-6902WH  Adaptor (11mm)  0523  23mm Brush (Fine)
SA-6902RH  Adaptor (23mm)  0723  23mm Brush (Coarse)

MP-6902K7-ST Accessories (included)

<table>
<thead>
<tr>
<th>Free Speed</th>
<th>Rec’d Hose Size</th>
<th>Length</th>
<th>Air Inlet Thread</th>
<th>Weight</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>3500 rpm</td>
<td>3/8&quot;</td>
<td>12&quot;</td>
<td>1/4&quot;</td>
<td>3.2 lbs.</td>
<td>4 cfm</td>
</tr>
</tbody>
</table>
Michigan Pneumatic  Model MP-10A-ST
Belt Sander
Small, lightweight belt sander, ideal for all materials, eliminates filing. Goes deep into hard to reach places, corners and spherical surfaces.

- **Belt Size**: 3/8” x 13”
- **Free Speed**: 16000 rpm
- **Height**: 2”
- **Maximum HP**: 0.4
- **Length (max.)**: 18-27/32”
- **Weight**: 1.7 lbs.
- **Air Inlet Thread**: 1/4”
- **Avg. Air Consumption**: 14 cfm

Michigan Pneumatic  Model MP-20S-ST
Belt Sander
Small, lightweight air sander will sand all jobs, all materials with amazing speed and ease. No surface escapes its all-surface capability. Levels and contours, even in corners. Adjustable handle rotates 360°. Change belts in seconds.

- **Belt Size**: 3/4” x 20-1/2”
- **Free Speed**: 12000 rpm
- **Height**: 2-23/64”
- **Maximum HP**: 0.6
- **Length (max.)**: 18-1/2”
- **Weight**: 3.1 lbs.
- **Air Inlet Thread**: 1/4”
- **Avg. Air Consumption**: 18 cfm

Michigan Pneumatic  Model MP-30S-ST
Belt Sander
The most efficient adjustable belt sander ever developed, with a new, silent motor. Sands all materials with speed and ease. Levels and contours, even in corners. Maximum efficiency without operator fatigue.

- **Belt Size**: 1-3/16” x 21”
- **Free Speed**: 12000 rpm
- **Height**: 4-1/8”
- **Maximum HP**: 0.7
- **Length (max.)**: 15.4”
- **Weight**: 2.9 lbs.
- **Air Inlet Thread**: 1/4”
- **Avg. Air Consumption**: 24 cfm

Michigan Pneumatic  Model MP-6201K-DD
Belt Sander Kit
Lightweight belt sander levels and contours most surfaces, even in corners. Includes 6 interchangeable contact arms and assorted sanding belts with plastic case.

- **Belt Size**: 1/4” - 1” x 18”
- **Free Speed**: 18000 rpm
- **Height**: 2-11/32”
- **Maximum HP**: 0.6
- **Length (max.)**: 13”
- **Weight**: 2.9 lbs.
- **Air Inlet Thread**: 1/4”
- **Avg. Air Consumption**: 16 cfm

Michigan Pneumatic  Model MP-MVM3562
Belt Sander
Comfortable and well balanced. Features easy fingertip tracking and belt changing. Excellent power and speed for any belt sanding operation. Ideal for working around water and in heavy dust environments. Uses standard 3” x 21” belts, 100 grit or finer. Includes dust extraction bag.

- **Belt Size**: 3” x 21”
- **Free Speed**: 2600 rpm
- **Height**: 8”
- **Maximum HP**: 1.25
- **Length (max.)**: 13”
- **Weight**: 9.25 lbs.
- **Air Inlet Thread**: 1/4”
- **Avg. Air Consumption**: 29 cfm
### Belt & Pad Sanders

#### Nitto Kohki Model B-10B

**Belt Sander**
Small, lightweight belt sander, ideal for all materials, eliminates filing. Goes deep into hard to reach places, corners and spherical surfaces.

<table>
<thead>
<tr>
<th>Belt Number</th>
<th>Grit</th>
<th>Belt Size</th>
<th>Free Speed</th>
<th>Height</th>
<th>Max. HP</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>61122</td>
<td>40</td>
<td>3/8&quot; x 13&quot;</td>
<td>16000 rpm</td>
<td>2&quot;</td>
<td>0.4</td>
<td>1.7 lbs.</td>
</tr>
<tr>
<td>61125</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>61127</td>
<td>120</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>61124</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>61126</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Nitto Kohki Model B-20C

**Belt Sander**
Small, lightweight air sander will sand all jobs, all materials with amazing speed and ease. No surface escapes its all-surface capability. Levels and contours, even in corners. Adjustable handle rotates 360°. Change belts in seconds.

<table>
<thead>
<tr>
<th>Belt Number</th>
<th>Grit</th>
<th>Belt Size</th>
<th>Free Speed</th>
<th>Height</th>
<th>Max. HP</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>60129</td>
<td>40</td>
<td>3/4&quot; x 20-1/2&quot;</td>
<td>16000 rpm</td>
<td>2-23/64&quot;</td>
<td>0.4</td>
<td>3.1 lbs.</td>
</tr>
<tr>
<td>60132</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60134</td>
<td>120</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60131</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60133</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Nitto Kohki Model B-30A

**Belt Sander**
The most efficient adjustable belt sander ever developed, with a new, silent motor. Sands all materials with speed and ease. Levels and contours, even in corners. Maximum efficiency without operator fatigue.

<table>
<thead>
<tr>
<th>Belt Number</th>
<th>Grit</th>
<th>Belt Size</th>
<th>Free Speed</th>
<th>Height</th>
<th>Max. HP</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>TP04084-0</td>
<td>60</td>
<td>1-3/16&quot; x 21&quot;</td>
<td>12000 rpm</td>
<td>4-1/8&quot;</td>
<td>0.7</td>
<td>4.9 lbs.</td>
</tr>
<tr>
<td>TP04086-0</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Nitto Kohki Model FS-50A

**Free Sander**
Compact and lightweight with low air consumption for big jobs and tight spots. Rugged construction for continuous operation. Perfect for surface finishing wood and thin plates or de-burring plastic. Features quick change paper clips for easy mounting. Low vibration motor reduces operator fatigue.

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Weight</th>
<th>Free Speed</th>
<th>Air Inlet Thread</th>
<th>Abrasive Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-3/4&quot; x 4-1/2&quot;</td>
<td>1.1 lbs.</td>
<td>15000 rpm</td>
<td>1/4&quot;</td>
<td>12.5 sq. in.</td>
</tr>
<tr>
<td>4-1/2&quot; x 5-1/2&quot;</td>
<td>1.1 lbs.</td>
<td>20000 rpm</td>
<td>1/4&quot;</td>
<td>24 sq. in.</td>
</tr>
</tbody>
</table>

#### Nitto Kohki Model FS-100C

**Free Sander**
Compact and lightweight with low air consumption for big jobs and tight spots. Rugged construction for continuous operation. Perfect for surface finishing wood and thin plates or de-burring plastic. Features quick change paper clips for easy mounting. Low vibration motor reduces operator fatigue.

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Weight</th>
<th>Free Speed</th>
<th>Air Inlet Thread</th>
<th>Abrasive Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-1/2&quot; x 5-1/2&quot;</td>
<td>1.1 lbs.</td>
<td>20000 rpm</td>
<td>1/4&quot;</td>
<td>24 sq. in.</td>
</tr>
</tbody>
</table>
Michigan Pneumatic  Model MP-865-ST  
Orbital Action Sander/Jitterbug  
Heavy-duty sander is ideal for body and paint shops. 3/16" orbital stroke provides a swirl-free finish. Powerful, fully enclosed motor. Balanced for vibration-free performance. Ideal for wet and dry sanding.

**Capacity**..............................3-2/3" x 9"  
**Free Speed**...........................6500 rpm  
**Abrasive Area**......................26 sq. in.  
**Weight**................................4.5 lbs.  
**Air Inlet Thread**........................1/4"  
**Avg. Air Consumption**....................7 cfm

National Detroit  Model 150 & Model 400  
Orbital Action Sanders  
Powerful, versatile, dependable, quiet sanders work on the principle of circular movement, with a 3/16" orbital stroke. Ideal for metal or wood finishing jobs. Great for hard to reach areas.

<table>
<thead>
<tr>
<th>Model</th>
<th>Neoprene Pad (150)</th>
<th>DP1084</th>
<th>Neoprene Pad (400)</th>
</tr>
</thead>
<tbody>
<tr>
<td>150</td>
<td>3&quot; x 8&quot;</td>
<td>3-2-3&quot; x 9&quot;</td>
<td></td>
</tr>
<tr>
<td>Free Speed</td>
<td>4000 - 6000 rpm</td>
<td>4000 - 6000 rpm</td>
<td></td>
</tr>
<tr>
<td>Abrasive Area</td>
<td>18 sq. in.</td>
<td>25 sq. in.</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>3.875</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td></td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>7 cfm</td>
<td>7 cfm</td>
<td></td>
</tr>
</tbody>
</table>

National Detroit  Model 2200  
Orbital Pad Sander  
Aggressive, yet controllable sander perfect for today's sanding needs. Non-marring pad and quiet motor round out the features.

8890RP  Rubber Pad  
8891RP  Rubber Pad, textured

<table>
<thead>
<tr>
<th>Capacity</th>
<th>2-3/4&quot; x 8&quot;</th>
<th>Weight</th>
<th>4.7 lbs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Speed</td>
<td>6000 rpm</td>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Abrasive Area</td>
<td>22 sq. in.</td>
<td>Avg. Air Consumption</td>
<td>11 cfm</td>
</tr>
</tbody>
</table>

National Detroit  Model 2200DE  
Orbital Pad Sander - with Vacuum Pickup  
Dust extraction version of the 2200 designed to remove contaminants from the work surface. Features a non-marring pad.

8890RP  Rubber Pad  
8891RP  Rubber Pad, textured

<table>
<thead>
<tr>
<th>Capacity</th>
<th>2-3/4&quot; x 8&quot;</th>
<th>Weight</th>
<th>4.8 lbs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Speed</td>
<td>6000 rpm</td>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Abrasive Area</td>
<td>22 sq. in.</td>
<td>Avg. Air Consumption</td>
<td>11 cfm</td>
</tr>
</tbody>
</table>

National Detroit  Model FB-8  
Orbital Pad Sander  
Rapid material knock-down achieved using positive thrust support from the motor. Superb counter-balancing insures minimal vibration reducing operator fatigue.

4191RP  Rubber Pad

<table>
<thead>
<tr>
<th>Capacity</th>
<th>2-3/4&quot; x 16&quot;</th>
<th>Weight</th>
<th>5.5 lbs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Speed</td>
<td>6000 rpm</td>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Abrasive Area</td>
<td>44 sq. in.</td>
<td>Avg. Air Consumption</td>
<td>11 cfm</td>
</tr>
</tbody>
</table>
National Detroit **Model 600**

**Straight-Line Sander**

Single pad sander will boost production and provide a better finish. Rapid stock removal with built-in water spray attachment. Paper change is simple and quick. Ideal for wet sanding. **OSHA approved.**

**Capacity**..............................3-2/3" x 9"  
**Free Speed**..........................3200 rpm  
**A abrasive Area**.......................25 sq. in.  
**Weight**.................................5.375 lbs.  
**Air Inlet Thread**.......................1/8"  
**Avg. Air Consumption**..............7 cfm

**6150**  
Molded Rubber Pad

---

National Detroit **Model 300**

**Two-Pad Straight-Line Sander**

Double pad sander will boost production and provide the best finish possible. Rapid stock removal with built-in water spray attachment. Ideal for wet sanding. Six different pads available, please specify. **Price includes shoes and pads.**

**Capacity**..............................3-2/3" x 9"  
**Free Speed**.........................2250 rpm  
**A abrasive Area**.......................50 sq. in.  
**Weight**.................................6 lbs.  
**Air Inlet Thread**.......................1/4"  
**Avg. Air Consumption**..............7 cfm

**DP1086**  
Rubber Pad

---

National Detroit **Model 1100**

**Straight-Line Sander**

Compact straight-line sander designed for fine finish work. Polymer pad shoe won’t damage work surface.

**Capacity**..............................2-3/4" x 9"  
**Free Speed**..........................6000 rpm  
**A abrasive Area**.......................22 sq. in.  
**Weight**.................................4.75 lbs.  
**Air Inlet Thread**.......................1/4"  
**Avg. Air Consumption**..............11 cfm

---

National Detroit **Model 1100DE**

**Straight-Line Sander**

Straight-line powerhouse with dust extraction system. Features non-marring polymer pad pad.

**Capacity**..............................2-3/4" x 8"  
**Free Speed**..........................6000 rpm  
**A abrasive Area**.......................22 sq. in.  
**Weight**.................................4.8 lbs.  
**Air Inlet Thread**.......................1/4"  
**Avg. Air Consumption**..............11 cfm

---

Michigan Pneumatic **Model MP-0065-ST**

**Straight-Line Sander**

The “President” features double acting pistons and a four cylinder driving system. As the dual pistons constantly work in alternating opposition to one another, there is no dead center, providing unparalleled power on the job and fatigue-free operation.

**Capacity**..............................2-3/4" x 17-1/4"  
**Free Speed**..........................3300 rpm  
**A abrasive Area**.......................40 sq. in.  
**Weight**.................................6.5 lbs.  
**Air Inlet Thread**.......................1/4"  
**Avg. Air Consumption**..............6 cfm
Newly developed pencil grinders are compact, super lightweight and designed to provide greater operator efficiency. Unusually powerful for the toughest jobs. Will grind all materials with amazing speed and ease. Ideal for metal, plastic, wood and stone works. **Not equipped with carbide burrs as shown. Includes 6 ft. exhaust hose.**

**Pencil Style Air Grinders**
with Adjustable Throttle

**Perfect for:**
- Finishing metal patterns
- Processing inner and outer surfaces
- Sheet metal working
- Treating after welding
- Finishing precision parts

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Collet Size</th>
<th>Free Speed</th>
<th>Diameter</th>
<th>Length</th>
<th>Weight</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-SM516</td>
<td>1/8&quot;</td>
<td>50000-54000 rpm</td>
<td>0.63&quot;</td>
<td>5.3&quot;</td>
<td>0.24 lbs.</td>
<td>0.78 cfm</td>
</tr>
<tr>
<td>MP-US3</td>
<td>1/8&quot;</td>
<td>50000-60000 rpm</td>
<td>0.63&quot;</td>
<td>5.3&quot;</td>
<td>0.24 lbs.</td>
<td>0.78 cfm</td>
</tr>
<tr>
<td>MP-US6</td>
<td>1/4&quot;</td>
<td>30000-40000 rpm</td>
<td>0.90&quot;</td>
<td>5.9&quot;</td>
<td>0.60 lbs.</td>
<td>1.10 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic**

**Model MP-1775-ST**

**Die Grinder - Rear Exhaust**

1/4" die grinder features a full bearing support air motor. Equipped with lever throttle for variable speed control. New rear exhaust directs air away from work area.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Collet Size</th>
<th>Free Speed</th>
<th>Diameter</th>
<th>Length</th>
<th>Weight</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-1073-0.125</td>
<td>1/8&quot;</td>
<td>25000 rpm</td>
<td>0.25</td>
<td>1/4&quot;</td>
<td>0.88 lbs.</td>
<td>3 cfm</td>
</tr>
<tr>
<td>C-1073-0.250</td>
<td>1/4&quot;</td>
<td>22000 rpm</td>
<td>0.25</td>
<td>1/4&quot;</td>
<td>1.25 lbs.</td>
<td>4 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic**

**Model MP-210-AT - Front Exhaust**

**Model MP-220-AT - Rear Exhaust**

Small, lightweight grinder is rugged for automotive and industrial work. Quality motor provides power, accuracy and durability. Front exhaust keeps work area clean. Variable speed control for high speed or high torque.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Collet Size</th>
<th>Free Speed</th>
<th>Diameter</th>
<th>Length</th>
<th>Weight</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-1073-0.125</td>
<td>1/8&quot;</td>
<td>22000 rpm</td>
<td>0.25</td>
<td>1/4&quot;</td>
<td>1.25 lbs.</td>
<td>4 cfm</td>
</tr>
<tr>
<td>C-1073-0.250</td>
<td>1/4&quot;</td>
<td>22000 rpm</td>
<td>0.25</td>
<td>1/4&quot;</td>
<td>1.25 lbs.</td>
<td>4 cfm</td>
</tr>
<tr>
<td>C-1005N</td>
<td>Collet Nut</td>
<td>Wrench</td>
<td>Wrench</td>
<td>220-30</td>
<td>220-32</td>
<td>220-32</td>
</tr>
</tbody>
</table>

See pages 59-61 for grinder accessories.
Angle Die Grinders

Michigan Pneumatic Model MP-AG21-ST

Angle Die Grinder - Front Exhaust

Powerful right angle grinder is designed to get into hard to reach areas where straight types are not accessible. Ideal for use with pressure sensitive discs, mounted points and rotary files for automotive body work. Front exhaust design keeps work area clean. Lightweight for easy handling.

<table>
<thead>
<tr>
<th>Model</th>
<th>Rec'd Hose Size</th>
<th>Maximum HP</th>
<th>Free Speed</th>
<th>Collet Size</th>
<th>Weight</th>
<th>Length</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-3040AE-c</td>
<td>1/4&quot;</td>
<td>0.24</td>
<td>13500 rpm</td>
<td>1/4&quot;</td>
<td>1 lb.</td>
<td>5&quot;</td>
<td>1/4&quot;</td>
<td>5-1/2&quot;</td>
</tr>
<tr>
<td>MP-3040A-c</td>
<td>1/4&quot;</td>
<td>0.24</td>
<td>13500 rpm</td>
<td>1/4&quot;</td>
<td>1 lb.</td>
<td>5&quot;</td>
<td>1/4&quot;</td>
<td>5-1/2&quot;</td>
</tr>
<tr>
<td>MP-3040E-c</td>
<td>1/4&quot;</td>
<td>0.24</td>
<td>13500 rpm</td>
<td>1/4&quot;</td>
<td>1 lb.</td>
<td>5&quot;</td>
<td>1/4&quot;</td>
<td>5-1/2&quot;</td>
</tr>
<tr>
<td>MP-3040A-C</td>
<td>1/4&quot;</td>
<td>0.24</td>
<td>13500 rpm</td>
<td>1/4&quot;</td>
<td>1 lb.</td>
<td>5&quot;</td>
<td>1/4&quot;</td>
<td>5-1/2&quot;</td>
</tr>
</tbody>
</table>

Michigan Pneumatic Model MP-2775-ST

Angle Die Grinder - Rear Exhaust

Rear exhaust die grinder features full bearing angle head construction. New rear exhaust directs air away from work area. Ideal for general purpose grinding in hard to reach areas. Uses pressure sensitive discs and mounted points for automotive body work. Equipped with independent power regulator and variable speed control.

<table>
<thead>
<tr>
<th>Model</th>
<th>Rec'd Hose Size</th>
<th>Maximum HP</th>
<th>Free Speed</th>
<th>Collet Size</th>
<th>Weight</th>
<th>Length</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-3040AE-c</td>
<td>1/4&quot;</td>
<td>0.24</td>
<td>13500 rpm</td>
<td>1/4&quot;</td>
<td>1 lb.</td>
<td>5&quot;</td>
<td>1/4&quot;</td>
<td>5-1/2&quot;</td>
</tr>
<tr>
<td>MP-3040A-c</td>
<td>1/4&quot;</td>
<td>0.24</td>
<td>13500 rpm</td>
<td>1/4&quot;</td>
<td>1 lb.</td>
<td>5&quot;</td>
<td>1/4&quot;</td>
<td>5-1/2&quot;</td>
</tr>
<tr>
<td>MP-3040E-c</td>
<td>1/4&quot;</td>
<td>0.24</td>
<td>13500 rpm</td>
<td>1/4&quot;</td>
<td>1 lb.</td>
<td>5&quot;</td>
<td>1/4&quot;</td>
<td>5-1/2&quot;</td>
</tr>
<tr>
<td>MP-3040A-C</td>
<td>1/4&quot;</td>
<td>0.24</td>
<td>13500 rpm</td>
<td>1/4&quot;</td>
<td>1 lb.</td>
<td>5&quot;</td>
<td>1/4&quot;</td>
<td>5-1/2&quot;</td>
</tr>
</tbody>
</table>

Nitto Kohki Model MAS-20B

Angle Sander/Grinder - Side Exhaust

Ultra compact sander/grinder with a built-in silencer. Ideal for sanding and grinding intricate shapes in cramped areas. Adding the 2" support pad, included, allows the use of 1", 1-1/2" and 2" paper discs in a variety of grits. Simple one touch twist lock speeds paper replacement.

<table>
<thead>
<tr>
<th>Model</th>
<th>Rec'd Hose Size</th>
<th>Maximum HP</th>
<th>Free Speed</th>
<th>Collet Size</th>
<th>Weight</th>
<th>Length</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAS-20B</td>
<td>1/4&quot;</td>
<td>0.24</td>
<td>13500 rpm</td>
<td>1/4&quot;</td>
<td>1 lb.</td>
<td>5&quot;</td>
<td>1/4&quot;</td>
<td>5-1/2&quot;</td>
</tr>
<tr>
<td>MP-3040A-c</td>
<td>1/4&quot;</td>
<td>0.24</td>
<td>13500 rpm</td>
<td>1/4&quot;</td>
<td>1 lb.</td>
<td>5&quot;</td>
<td>1/4&quot;</td>
<td>5-1/2&quot;</td>
</tr>
<tr>
<td>MP-3040E-c</td>
<td>1/4&quot;</td>
<td>0.24</td>
<td>13500 rpm</td>
<td>1/4&quot;</td>
<td>1 lb.</td>
<td>5&quot;</td>
<td>1/4&quot;</td>
<td>5-1/2&quot;</td>
</tr>
<tr>
<td>MP-3040A-C</td>
<td>1/4&quot;</td>
<td>0.24</td>
<td>13500 rpm</td>
<td>1/4&quot;</td>
<td>1 lb.</td>
<td>5&quot;</td>
<td>1/4&quot;</td>
<td>5-1/2&quot;</td>
</tr>
</tbody>
</table>

Michigan Pneumatic Model MP-3040-C

Angle Die Grinder - Side Exhaust

Industrial grinder excellent for die contouring, deburring and blending in hard to reach areas. Model MP-3040A-C with aluminum motor housing available.

<table>
<thead>
<tr>
<th>Model</th>
<th>Rec'd Hose Size</th>
<th>Maximum HP</th>
<th>Free Speed</th>
<th>Collet Size</th>
<th>Weight</th>
<th>Length</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-3040AE-c</td>
<td>1/4&quot;</td>
<td>0.24</td>
<td>13500 rpm</td>
<td>1/4&quot;</td>
<td>1 lb.</td>
<td>5&quot;</td>
<td>1/4&quot;</td>
<td>5-1/2&quot;</td>
</tr>
<tr>
<td>MP-3040A-c</td>
<td>1/4&quot;</td>
<td>0.24</td>
<td>13500 rpm</td>
<td>1/4&quot;</td>
<td>1 lb.</td>
<td>5&quot;</td>
<td>1/4&quot;</td>
<td>5-1/2&quot;</td>
</tr>
<tr>
<td>MP-3040E-c</td>
<td>1/4&quot;</td>
<td>0.24</td>
<td>13500 rpm</td>
<td>1/4&quot;</td>
<td>1 lb.</td>
<td>5&quot;</td>
<td>1/4&quot;</td>
<td>5-1/2&quot;</td>
</tr>
<tr>
<td>MP-3040A-C</td>
<td>1/4&quot;</td>
<td>0.24</td>
<td>13500 rpm</td>
<td>1/4&quot;</td>
<td>1 lb.</td>
<td>5&quot;</td>
<td>1/4&quot;</td>
<td>5-1/2&quot;</td>
</tr>
</tbody>
</table>

Michigan Pneumatic Model MP-3040E-C

Extended Angle Die Grinder - Side Exhaust

Extended grinder used in die shops, shipyards, foundries and fabrication shops. Rugged 1 HP motor. Model MP-3040AE-C with aluminum motor housing available.

<table>
<thead>
<tr>
<th>Model</th>
<th>Rec'd Hose Size</th>
<th>Maximum HP</th>
<th>Free Speed</th>
<th>Collet Size</th>
<th>Weight</th>
<th>Length</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-3040AE-c</td>
<td>1/4&quot;</td>
<td>0.24</td>
<td>13500 rpm</td>
<td>1/4&quot;</td>
<td>1 lb.</td>
<td>5&quot;</td>
<td>1/4&quot;</td>
<td>5-1/2&quot;</td>
</tr>
<tr>
<td>MP-3040A-c</td>
<td>1/4&quot;</td>
<td>0.24</td>
<td>13500 rpm</td>
<td>1/4&quot;</td>
<td>1 lb.</td>
<td>5&quot;</td>
<td>1/4&quot;</td>
<td>5-1/2&quot;</td>
</tr>
<tr>
<td>MP-3040E-c</td>
<td>1/4&quot;</td>
<td>0.24</td>
<td>13500 rpm</td>
<td>1/4&quot;</td>
<td>1 lb.</td>
<td>5&quot;</td>
<td>1/4&quot;</td>
<td>5-1/2&quot;</td>
</tr>
<tr>
<td>MP-3040A-C</td>
<td>1/4&quot;</td>
<td>0.24</td>
<td>13500 rpm</td>
<td>1/4&quot;</td>
<td>1 lb.</td>
<td>5&quot;</td>
<td>1/4&quot;</td>
<td>5-1/2&quot;</td>
</tr>
</tbody>
</table>

See pages 59-61 for grinder accessories.
## Michigan Pneumatic Model MP-1151B-ST

**Die Grinder - Rear Exhaust**

Comfort cushioned die grinder perfect for delicate finishing work. Features recessed safety lever throttle and top mounted air regulator. Part of the Quiet Tools family of grinders.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collet Size</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>20000 rpm</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>0.25</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>1.50 lbs.</td>
</tr>
<tr>
<td>Length</td>
<td>7-13/32&quot;</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>4 cfm</td>
</tr>
</tbody>
</table>

## Michigan Pneumatic Model MP-2753-ST

**Die Grinder - Rear Exhaust**

Silenced, 77dB(A), rear exhaust set this tool apart from the rest. Features top mounted air regulator, cushion grip and recessed safety lever throttle.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collet Size</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>25000 rpm</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>0.30</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>1.25 lbs.</td>
</tr>
<tr>
<td>Length</td>
<td>6-1/8&quot;</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>4 cfm</td>
</tr>
</tbody>
</table>

## Michigan Pneumatic Model MP-2754-ST

**Die Grinder - Rear Exhaust**

Featuring top mounted air regulator and recessed safety throttle lever design gives our extended grinder a leg up on the competition. Perfect for those hard to reach areas. Includes same silenced exhaust as all of the Quiet Tools family.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collet Size</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>20000 rpm</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>0.30</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>1.33 lbs.</td>
</tr>
<tr>
<td>Length</td>
<td>6-11/16&quot;</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>4 cfm</td>
</tr>
</tbody>
</table>

## Michigan Pneumatic Model MP-7252-ST

**Angle Die Grinder - Rear Exhaust**

Silenced, 77dB(A), rear exhaust set this tool apart from the rest. Features top mounted air regulator, cushion grip and recessed safety lever throttle.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collet Size</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>20000 rpm</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>0.30</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>1.33 lbs.</td>
</tr>
<tr>
<td>Length</td>
<td>6-11/16&quot;</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>4 cfm</td>
</tr>
</tbody>
</table>

## Michigan Pneumatic Model MP-7255-ST

**Angle Die Grinder - Rear Exhaust**

115° degree angle grinder features recessed safety lever throttle cushion grip and top mounted air regulator. Silenced, 77dB(A), rear exhaust to reduce tool noise.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collet Size</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>20000 rpm</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>0.30</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>1.40 lbs.</td>
</tr>
<tr>
<td>Length</td>
<td>7-29/32&quot;</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>4 cfm</td>
</tr>
</tbody>
</table>

See pages 59-61 for grinder accessories.
Michigan Pneumatic Model MP-00001 - Button Throttle

**Die Grinder** - Front Exhaust

Powerful, high speed baby grinder specially designed to drive carbide burrs and rotary files for effective metal removal or delicate finishing. Ideal for production work and cleaning castings in confined areas. Lever throttle permits varying speed for greater versatility. **Parts are interchangeable with Ingersoll-Rand 00 grinder.**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Collet Size</th>
<th>Free Speed</th>
<th>Exhaust</th>
<th>Diameter</th>
<th>Length</th>
<th>Weight</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>G-53801</td>
<td>1/8&quot; Collet</td>
<td>20000 rpm</td>
<td>Front</td>
<td>6-3/4&quot;</td>
<td>1.7 lbs.</td>
<td>3/8&quot;</td>
<td>1/4&quot;</td>
<td>17.6 cfm</td>
<td></td>
</tr>
<tr>
<td>G-53802</td>
<td>1/4&quot; Collet</td>
<td>20000 rpm</td>
<td>Front</td>
<td>6-3/4&quot;</td>
<td>1.5 lbs.</td>
<td>3/8&quot;</td>
<td>1/4&quot;</td>
<td>17.6 cfm</td>
<td></td>
</tr>
</tbody>
</table>

See pages 59-61 for grinder accessories.
Hand-Held Routers

These hand-held “mini” base routers are ideal for trimming and cutting plastic parts, removing flashing from injection molded parts, wood, aluminum and fiberglass. Lightweight and easily maneuvered in tight areas. Perfect for one hand operation. Model GR-2402 router guide not included. Please order separately.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Collet Size</th>
<th>Free Speed</th>
<th>Max. HP</th>
<th>Exhaust</th>
<th>Housing Material</th>
<th>Length</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>DG20RTR</td>
<td>1/4&quot;</td>
<td>30000 rpm</td>
<td>0.60</td>
<td>Rear</td>
<td>Steel w/ Plastic Cover</td>
<td>9-13/16&quot;</td>
<td>3.25 lbs.</td>
</tr>
<tr>
<td>MP-GR2510</td>
<td>1/4&quot;</td>
<td>25000 rpm</td>
<td>1.00</td>
<td>Front</td>
<td>Steel</td>
<td>6-3/4&quot;</td>
<td>3.25 lbs.</td>
</tr>
<tr>
<td>MP-GR2510A</td>
<td>1/4&quot;</td>
<td>25000 rpm</td>
<td>1.00</td>
<td>Front</td>
<td>Aluminum</td>
<td></td>
<td>2.50 lbs.</td>
</tr>
<tr>
<td>MP-GR1810</td>
<td>1/4&quot;</td>
<td>18000 rpm</td>
<td>1.00</td>
<td>Front</td>
<td>Aluminum</td>
<td></td>
<td>3.25 lbs.</td>
</tr>
<tr>
<td>MP-GR1810A</td>
<td>1/4&quot;</td>
<td>18000 rpm</td>
<td>1.00</td>
<td>Front</td>
<td>Aluminum</td>
<td></td>
<td>2.50 lbs.</td>
</tr>
</tbody>
</table>

Routers - with 6" Base

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Collet Size</th>
<th>Free Speed</th>
<th>Max. HP</th>
<th>Exhaust</th>
<th>Housing Material</th>
<th>Length</th>
<th>Weight</th>
<th>Base Diameter</th>
<th>Base Collar I.D.</th>
<th>Base Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-70000RTR</td>
<td>1/4&quot;</td>
<td>18000 rpm</td>
<td>0.55</td>
<td>Front</td>
<td>Aluminum</td>
<td>6-3/4&quot;</td>
<td>2.75 lbs.</td>
<td>5&quot;</td>
<td>1.375&quot;</td>
<td>4-1/4&quot;</td>
</tr>
<tr>
<td>MP-22000RTR</td>
<td>1/4&quot;</td>
<td>18000 rpm</td>
<td>0.70</td>
<td>Front</td>
<td>Aluminum</td>
<td>8&quot;</td>
<td>4.25 lbs.</td>
<td>5-3/4&quot;</td>
<td>1.750&quot;</td>
<td>5&quot;</td>
</tr>
</tbody>
</table>

Michigan Pneumatic MP-8009RS

Rivet Shaver Kit

Heavy-duty rivet shaver ideal for precision shaving of rivet heads. Designed so the skirt face is parallel to the cutter face. Spring loaded nose piece and stabilizer enables operator to feed cutter to the rivet faster and more accurately. Includes seven skirts (as shown). Cutter bits sold separately.

Free Speed .......................... 16000 rpm
Rec’d Hose Size ..................... 3/8"
Length .................................. 7-1/2"
Weight ................................. 3.1 lbs.
Air Inlet Thread .................... 1/4"
Avg. Air Consumption .............. 4 cfm

See pages 59-61 for grinder accessories.
Industrial Die Grinders

**Standard Arbor Die Grinders - Rear Exhaust**

**DG Series** for metal removal and precision die grinding. Features include: Standard and extended arbor models, safety-lock lever throttle, rear exhaust, lower sound level, one-piece collet, collet and threaded spindle models, high power to weight ratio, efficient and longer lasting, and an all steel housing with cushioning sleeve. Uses Ingersoll-Rand “New Generation” die grinder parts.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Collet Size</th>
<th>Free Speed</th>
<th>Max. HP</th>
<th>Overall Length</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>DG10G4</td>
<td>1/4&quot;</td>
<td>40000 rpm</td>
<td>0.33</td>
<td>6-3/16&quot;</td>
<td>1 lb.</td>
</tr>
<tr>
<td>DG20G4</td>
<td>1/4&quot;</td>
<td>30000 rpm</td>
<td>0.66</td>
<td>7-3/4&quot;</td>
<td>2 lbs.</td>
</tr>
<tr>
<td>DG20L6</td>
<td>3/8&quot;-24 thrd.</td>
<td>30000 rpm</td>
<td>0.66</td>
<td>7-3/4&quot;</td>
<td>2 lbs.</td>
</tr>
</tbody>
</table>

**Extended Arbor Die Grinders - Rear Exhaust**

**EG Series** for finishing and polishing applications, metal removal and precision die grinding. Features include: OSHA approved, extended arbor models for greater versatility, safety-lock lever throttle, rear exhaust, lower sound level, one-piece collet, collet and threaded spindle models, unusually high power and speed, and an all steel housing with cushioning sleeve. Uses Ingersoll-Rand “New Generation” die grinder parts.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Collet Size</th>
<th>Free Speed</th>
<th>Max. HP</th>
<th>Overall Length</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>EG10G4</td>
<td>1/4&quot;</td>
<td>40000 rpm</td>
<td>0.33</td>
<td>9-11/16&quot;</td>
<td>1.5 lbs.</td>
</tr>
<tr>
<td>EG20G4</td>
<td>1/4&quot;</td>
<td>30000 rpm</td>
<td>0.66</td>
<td>12-3/4&quot;</td>
<td>2.5 lbs.</td>
</tr>
<tr>
<td>EG20L6</td>
<td>3/8&quot;-24 thrd.</td>
<td>30000 rpm</td>
<td>0.66</td>
<td>12-3/4&quot;</td>
<td>2.5 lbs.</td>
</tr>
</tbody>
</table>

**Standard Arbor Die Grinders - Front Exhaust**

Uses mounted stones, wire brushes or carbide burrs. Ideal for use in foundries, welding and fabrications shops, shipyards, rail car repair and many other industrial facilities.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Collet Size</th>
<th>Free Speed</th>
<th>Housing</th>
<th>Overall Length</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-9113A-14</td>
<td>1/4&quot;</td>
<td>25000 rpm</td>
<td>Steel</td>
<td>6-1/4&quot;</td>
<td>2.25 lbs.</td>
</tr>
<tr>
<td>MP-9113A-38</td>
<td>3/8&quot;</td>
<td>Steel</td>
<td>Aluminum</td>
<td>1.50 lbs.</td>
<td></td>
</tr>
<tr>
<td>MP-9113AE-14</td>
<td>1/4&quot;</td>
<td>25000 rpm</td>
<td>Aluminum</td>
<td>1.50 lbs.</td>
<td></td>
</tr>
<tr>
<td>MP-9113AE-38</td>
<td>3/8&quot;</td>
<td>Steel</td>
<td>Aluminum</td>
<td>1.50 lbs.</td>
<td></td>
</tr>
</tbody>
</table>

Maximum HP ............................ 1.00 Air Inlet Thread ................. 1/4" NPT
Rec’d Hose Size ......................... 3/8" Avg. Air Consumption .......... 11.9 cfm

**Extended Arbor Die Grinders - Side Exhaust**

Uses mounted stones, wire brushes or carbide burrs. Ideal for use in foundries, welding and fabrications shops, shipyards, rail car repair and many other industrial facilities.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Collet Size</th>
<th>Free Speed</th>
<th>Housing</th>
<th>Overall Length</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-9113E-14</td>
<td>1/4&quot;</td>
<td>25000 rpm</td>
<td>Steel</td>
<td>11-1/16&quot;</td>
<td>3.30 lbs.</td>
</tr>
<tr>
<td>MP-9113E-38</td>
<td>3/8&quot;</td>
<td>Steel</td>
<td>Aluminum</td>
<td>2.63 lbs.</td>
<td></td>
</tr>
<tr>
<td>MP-9113EAE-14</td>
<td>1/4&quot;</td>
<td>25000 rpm</td>
<td>Aluminum</td>
<td>2.63 lbs.</td>
<td></td>
</tr>
<tr>
<td>MP-9113EAE-38</td>
<td>3/8&quot;</td>
<td>Steel</td>
<td>Aluminum</td>
<td>2.63 lbs.</td>
<td></td>
</tr>
</tbody>
</table>

Maximum HP ............................ 1.00 Air Inlet Thread ................. 1/4" NPT
Rec’d Hose Size ......................... 3/8" Avg. Air Consumption .......... 11.9 cfm

See pages 59-61 for grinder accessories.
### Collet Mount Adapters & Extensions

#### 1/4" Collet Mount

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Hole Dia.</th>
<th>Wheel Dia.</th>
<th>Wheel Width</th>
<th>Screw Dia.</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE-105A</td>
<td>3/8&quot;</td>
<td>1/64&quot; - 9/16&quot;</td>
<td>3&quot;</td>
<td>1&quot;</td>
<td>2-1/2&quot;</td>
</tr>
<tr>
<td>AE-106-1A</td>
<td>1/4&quot;</td>
<td>1/64&quot; - 3/8&quot;</td>
<td>3&quot;</td>
<td>1&quot;</td>
<td>2-1/8&quot;</td>
</tr>
<tr>
<td>AE-124A</td>
<td>1/4&quot;</td>
<td>1/64&quot; - 3/4&quot;</td>
<td>3&quot;</td>
<td>1&quot;</td>
<td>2-5/8&quot;</td>
</tr>
<tr>
<td>AE-126A</td>
<td>2&quot;</td>
<td>1/16&quot; - 1/4&quot;</td>
<td>5/8&quot;</td>
<td>2-1/8&quot;</td>
<td></td>
</tr>
<tr>
<td>AE-127A</td>
<td>2&quot;</td>
<td>1/16&quot; - 1/4&quot;</td>
<td>1&quot;</td>
<td>2-13/16&quot;</td>
<td></td>
</tr>
</tbody>
</table>

#### 3/8" Collet Mount

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Hole Dia.</th>
<th>Wheel Dia.</th>
<th>Wheel Width</th>
<th>Screw Dia.</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE-140A</td>
<td>3/8&quot;</td>
<td>1/64&quot; - 1/4&quot;</td>
<td>3&quot;</td>
<td>1&quot;</td>
<td>2-1/2&quot;</td>
</tr>
<tr>
<td>AE-141A</td>
<td>3/8&quot;</td>
<td>1/64&quot; - 1/4&quot;</td>
<td>3&quot;</td>
<td>1&quot;</td>
<td>3&quot;</td>
</tr>
<tr>
<td>AE-150A</td>
<td>3/8&quot;</td>
<td>1/64&quot; - 1/4&quot;</td>
<td>3&quot;</td>
<td>1&quot;</td>
<td>2-5/8&quot;</td>
</tr>
<tr>
<td>AE-226A</td>
<td>4&quot;</td>
<td>1/64&quot; - 1/2&quot;</td>
<td>1-1/4&quot;</td>
<td>2-5/8&quot;</td>
<td></td>
</tr>
<tr>
<td>AE-229A-1</td>
<td>4&quot;</td>
<td>1/64&quot; - 1/4&quot;</td>
<td>1-1/4&quot;</td>
<td>2-5/8&quot;</td>
<td></td>
</tr>
</tbody>
</table>

#### 3/8" Collet Mounted Cone and Plug Wheel

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Thread</th>
<th>Wheel Dia.</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE-139</td>
<td>3/8&quot;-24</td>
<td>3&quot;</td>
<td>2-5/32&quot;</td>
</tr>
<tr>
<td>AE-148</td>
<td>5/8&quot;-11</td>
<td>3&quot;</td>
<td>2-5/32&quot;</td>
</tr>
<tr>
<td>AE-206</td>
<td>5/8&quot;-11</td>
<td>3&quot;</td>
<td>2-3/8&quot;</td>
</tr>
</tbody>
</table>

#### 1/4" Collet Mounted Cone and Plug Wheel

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Thread</th>
<th>Wheel Dia.</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE-109</td>
<td>5/8&quot;-11</td>
<td>3&quot;</td>
<td>2-5/32&quot;</td>
</tr>
<tr>
<td>AE-123</td>
<td>3/8&quot;-24</td>
<td>3&quot;</td>
<td>2-5/32&quot;</td>
</tr>
</tbody>
</table>

### Spindle Mount Adapters & Extensions

#### 3/8"-24 Thread Mount

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Wheel I.D.</th>
<th>Wheel Width</th>
<th>Wheel Dia.</th>
<th>Thread</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE-103A</td>
<td>3/8&quot;</td>
<td>1/2&quot;</td>
<td>3&quot;</td>
<td>3/8&quot;-24</td>
<td>2-1/2&quot;</td>
</tr>
<tr>
<td>AE-175A</td>
<td>3/8&quot;</td>
<td>1/2&quot;</td>
<td>3&quot;</td>
<td>3/8&quot;-24</td>
<td>1-13/16&quot;</td>
</tr>
<tr>
<td>AE-177A</td>
<td>3/8&quot;</td>
<td>5/8&quot;</td>
<td>2&quot;</td>
<td>3/8&quot;-24</td>
<td>1-15/16&quot;</td>
</tr>
</tbody>
</table>

#### Thread Mount Cone and Plug Wheel

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Int. Thread</th>
<th>Ext. Thread</th>
<th>Wheel Size</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE-107-1</td>
<td>3/8&quot;-24</td>
<td>5/8&quot;-11</td>
<td>3&quot;</td>
<td>2-1/8&quot;</td>
</tr>
<tr>
<td>AE-107-2</td>
<td>1/2&quot;-13</td>
<td>5/8&quot;-11</td>
<td>2-1/8&quot;</td>
<td></td>
</tr>
<tr>
<td>AE-107-3</td>
<td>3/8&quot;-24</td>
<td>1/2&quot;-20</td>
<td>2-1/8&quot;</td>
<td></td>
</tr>
<tr>
<td>AE-118</td>
<td>3/8&quot;-24</td>
<td>3/8&quot;-24</td>
<td>2-1/8&quot;</td>
<td></td>
</tr>
<tr>
<td>AE-122</td>
<td>3/8&quot;-24</td>
<td>5/8&quot;-11</td>
<td>15/16&quot;</td>
<td></td>
</tr>
<tr>
<td>AE-131</td>
<td>3/8&quot;-24</td>
<td>5/8&quot;-11</td>
<td>2&quot;</td>
<td></td>
</tr>
<tr>
<td>AE-176</td>
<td>3/8&quot;-24</td>
<td>3/8&quot;-24</td>
<td>13/16&quot;</td>
<td></td>
</tr>
<tr>
<td>AE-182</td>
<td>3/8&quot;-24</td>
<td>3/8&quot;-24</td>
<td>3-5/16&quot;</td>
<td></td>
</tr>
</tbody>
</table>

#### 5/8"-11 Thread Mount

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Int. Thread</th>
<th>Ext. Thread</th>
<th>Wheel Size</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE-211</td>
<td>5/8&quot;-11 x 3/4&quot;</td>
<td>5/8&quot;-11</td>
<td>1-3/16&quot;</td>
<td>4-1/4&quot;</td>
</tr>
<tr>
<td>AE-212</td>
<td>5/8&quot;-11 x 3-3/4&quot;</td>
<td>5/8&quot;-11</td>
<td>7-1/4&quot;</td>
<td></td>
</tr>
</tbody>
</table>

See pages 60-61 & 72-73 for additional grinder accessories.
# Collet Assemblies

## Collet Chuck Assemblies

Assemblies for 1/4", 3/8" or 1/2" shank mounted wheels or rotary files. Other collets, collet inserts and collet chuck nuts available.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Replaces</th>
<th>Style</th>
<th>Capacity</th>
<th>Collet Nut</th>
<th>Length</th>
<th>Internal Thread</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-1001A</td>
<td>ARO #30489-1</td>
<td>2-piece</td>
<td>1/4&quot;</td>
<td>C-1001N</td>
<td>1-7/8&quot;</td>
<td>3/8&quot;-24</td>
</tr>
<tr>
<td>C-1002A</td>
<td>ARO #30854-3</td>
<td>3-piece</td>
<td>1/4&quot;</td>
<td>C-1002N</td>
<td>2-1/4&quot;</td>
<td></td>
</tr>
<tr>
<td>C-1007A</td>
<td>MPT #43801-3</td>
<td>3-piece</td>
<td>1/4&quot;</td>
<td>C-1002N</td>
<td>2-1/4&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dresser #849142</td>
<td>2-piece</td>
<td>1/4&quot;</td>
<td>C-1007N</td>
<td>2-3/16&quot;</td>
<td></td>
</tr>
<tr>
<td>C-1008A</td>
<td>I-R #ROA-390-1/4&quot;</td>
<td>2-piece</td>
<td>1/4&quot;</td>
<td>C-1008N</td>
<td>2-1/2&quot;</td>
<td></td>
</tr>
<tr>
<td>C-1009A</td>
<td>B&amp;D #718504</td>
<td>2-piece</td>
<td>1/4&quot;</td>
<td>C-1009N</td>
<td>1-5/8&quot;</td>
<td></td>
</tr>
<tr>
<td>C-1010A</td>
<td>Rotor #M827-1037</td>
<td>2-piece</td>
<td>1/4&quot;</td>
<td>C-1010N</td>
<td>2-1/2&quot;</td>
<td></td>
</tr>
<tr>
<td>C-1012A</td>
<td>Rockwell #Y-373</td>
<td>2-piece</td>
<td>1/4&quot;</td>
<td>C-1012N</td>
<td>1-9/16&quot;</td>
<td></td>
</tr>
<tr>
<td>C-1013A</td>
<td>Rotor #M1086-1096</td>
<td>2-piece</td>
<td>1/4&quot;</td>
<td>C-1013N</td>
<td>1-5/8&quot;</td>
<td></td>
</tr>
<tr>
<td>C-1014A</td>
<td>Thor #58980</td>
<td>2-piece</td>
<td>1/4&quot;</td>
<td>C-1014N</td>
<td>2-3/16&quot;</td>
<td></td>
</tr>
<tr>
<td>C-1015A</td>
<td>B&amp;D #718590</td>
<td>2-piece</td>
<td>3/8&quot;</td>
<td>C-1015N</td>
<td>2-3/8&quot;</td>
<td></td>
</tr>
<tr>
<td>C-1016A</td>
<td>H.D. Grinders 1/2&quot; cap.</td>
<td>2-piece</td>
<td>1/2&quot;</td>
<td>C-1045N</td>
<td>2-11/16&quot;</td>
<td></td>
</tr>
<tr>
<td>C-1021A</td>
<td>Erickson #A43807</td>
<td>4-piece</td>
<td>1/4&quot;</td>
<td>C-1021N</td>
<td>1-3/4&quot;</td>
<td></td>
</tr>
<tr>
<td>C-1023A-0.250</td>
<td>Erickson #A34464</td>
<td>3-piece</td>
<td>1/4&quot;</td>
<td>C-1023N</td>
<td>1-7/8&quot;</td>
<td></td>
</tr>
<tr>
<td>C-1023A-0.375</td>
<td>Erickson #A34464</td>
<td>3-piece</td>
<td>3/8&quot;</td>
<td>C-1023N</td>
<td>1-7/8&quot;</td>
<td></td>
</tr>
<tr>
<td>C-1024A</td>
<td>All H.D. Grinders</td>
<td>2-piece</td>
<td>1/4&quot;</td>
<td>C-1010N</td>
<td>2-5/8&quot;</td>
<td>1/2&quot;-13</td>
</tr>
<tr>
<td>C-1032A</td>
<td>ARO #41753-3</td>
<td>3-piece</td>
<td>1/4&quot;</td>
<td>C-1032N</td>
<td>2-1/4&quot;</td>
<td>3/8&quot;-24</td>
</tr>
<tr>
<td>C-1034A</td>
<td>Erickson #A48590</td>
<td>4-piece</td>
<td>1/4&quot;</td>
<td>C-1021N</td>
<td>1-3/4&quot;</td>
<td>5/16&quot;-24</td>
</tr>
<tr>
<td>C-1035A</td>
<td>Erickson #A6488/D Double Angle</td>
<td>3-piece</td>
<td>3/8&quot;</td>
<td>C-1035N</td>
<td>2-1/16&quot;</td>
<td>3/8&quot;-24</td>
</tr>
<tr>
<td>C-1036A</td>
<td>CP #C-069969</td>
<td>2-piece</td>
<td>1/4&quot;</td>
<td>C-1036N</td>
<td>3-1/2&quot;</td>
<td>3/8&quot;-24</td>
</tr>
<tr>
<td>C-1039A</td>
<td>I-R #ROA-390-1/4&quot;</td>
<td>2-piece</td>
<td>1/4&quot;</td>
<td>C-1039N</td>
<td>3-1/8&quot;</td>
<td>1/2&quot;-13</td>
</tr>
<tr>
<td>C-1049A-5/7/9</td>
<td>ARO #30385-1</td>
<td>3-piece</td>
<td>1/4&quot;</td>
<td>C-1049N</td>
<td>5/7/&quot;/9&quot;</td>
<td>3/8&quot;-24</td>
</tr>
<tr>
<td>C-1056A</td>
<td>All H.D. Grinders</td>
<td>2-piece</td>
<td>1/4&quot;</td>
<td>C-1039N</td>
<td>3-1/8&quot;</td>
<td>3/8&quot;-24</td>
</tr>
<tr>
<td>C-1060A</td>
<td>CP #S-0666271Y</td>
<td>3-piece</td>
<td>1/4&quot;</td>
<td>C-1013N</td>
<td>2-3/16&quot;</td>
<td>3/8&quot;-24</td>
</tr>
<tr>
<td>C-1070A</td>
<td>B&amp;D #44016</td>
<td>3-piece</td>
<td>3/8&quot;</td>
<td>C-1070N</td>
<td>2-5/8&quot;</td>
<td>3/8&quot;-24</td>
</tr>
<tr>
<td>C-1079A-0.250</td>
<td>CP #C-069969</td>
<td>3-piece</td>
<td>1/4&quot;</td>
<td>C-1079N</td>
<td>2-1/4&quot;</td>
<td>3/8&quot;-24</td>
</tr>
<tr>
<td>C-1079A-0.375</td>
<td>CP #C-069969</td>
<td>3-piece</td>
<td>3/8&quot;</td>
<td>C-1079N</td>
<td>2-1/4&quot;</td>
<td>3/8&quot;-24</td>
</tr>
<tr>
<td>C-1084A-0.250</td>
<td>CP #C-069969</td>
<td>3-piece</td>
<td>1/4&quot;</td>
<td>C-1084N</td>
<td>2-1/2&quot;</td>
<td>1/2&quot;-20</td>
</tr>
<tr>
<td>C-1084A-0.375</td>
<td>CP #C-069969</td>
<td>3-piece</td>
<td>3/8&quot;</td>
<td>C-1084N</td>
<td>2-1/2&quot;</td>
<td>1/2&quot;-20</td>
</tr>
<tr>
<td>C-1084A-0.500</td>
<td>CP #C-069969</td>
<td>3-piece</td>
<td>1/2&quot;</td>
<td>C-1084N</td>
<td>2-1/2&quot;</td>
<td>1/2&quot;-20</td>
</tr>
<tr>
<td>C-1084A-1220-0.250</td>
<td>CP #C-069969</td>
<td>3-piece</td>
<td>1/4&quot;</td>
<td>C-1084N</td>
<td>2-1/2&quot;</td>
<td>1/2&quot;-20</td>
</tr>
<tr>
<td>C-1084A-1220-0.375</td>
<td>CP #C-069969</td>
<td>3-piece</td>
<td>3/8&quot;</td>
<td>C-1084N</td>
<td>2-1/2&quot;</td>
<td>1/2&quot;-20</td>
</tr>
<tr>
<td>C-1104A</td>
<td>2-piece</td>
<td>1/4&quot;</td>
<td>C-1107N</td>
<td>3-1/8&quot;</td>
<td>5/8&quot;-11</td>
<td></td>
</tr>
</tbody>
</table>

See pages 59, 61 & 72-73 for additional grinder accessories.
Collet Inserts
Replacement collet inserts for collet chuck assemblies.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Replaces</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-1025-0.125</td>
<td>ARO #30847; MP #44850</td>
<td>1/8&quot;</td>
</tr>
<tr>
<td>C-1025-0.250</td>
<td></td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>C-1026-0.250</td>
<td>(not shown)</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>C-1027-0.125</td>
<td>ARO #31812; B&amp;D #44001; CP #C110299Y; I-R #G120-700; Rotor #1233-1317</td>
<td>1/8&quot;</td>
</tr>
<tr>
<td>C-1027-0.1875</td>
<td></td>
<td>3/16&quot;</td>
</tr>
<tr>
<td>C-1027-0.250</td>
<td></td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>C-1028-0.125</td>
<td>ARO #32968; CP #C119729Y; I-R #G140-700</td>
<td>1/8&quot;</td>
</tr>
<tr>
<td>C-1028-0.1875</td>
<td></td>
<td>3/16&quot;</td>
</tr>
<tr>
<td>C-1028-0.250</td>
<td></td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>C-1028-0.375</td>
<td></td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>C-1030-0.125</td>
<td>B&amp;D #71852 (not shown)</td>
<td>1/8&quot;</td>
</tr>
<tr>
<td>C-1030-0.250</td>
<td></td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>C-1033-0.125</td>
<td>ARO #41750</td>
<td>1/8&quot;</td>
</tr>
<tr>
<td>C-1033-0.250</td>
<td></td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>C-1074-0.125</td>
<td>CP #KF124524-C-138727; Rockwell #92233; UPI #1610 &amp; #551</td>
<td>1/8&quot;</td>
</tr>
<tr>
<td>C-1074-0.250</td>
<td></td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>C-1093-0.125</td>
<td>B&amp;D #718524-3/16&quot; &amp; #718525-3/32&quot;; Rockwell #1006647</td>
<td>1/8&quot;</td>
</tr>
<tr>
<td>C-1093-0.1875</td>
<td></td>
<td>3/16&quot;</td>
</tr>
<tr>
<td>C-1093-0.250</td>
<td></td>
<td>1/4&quot;</td>
</tr>
</tbody>
</table>

Collet Chuck Nuts
Collet chuck nuts are available for all collet chucks.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Replaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-1005N</td>
<td>I-R #308-699; CP #KF-124525</td>
</tr>
<tr>
<td>C-1009N</td>
<td>B&amp;D #718519; Master #550-35</td>
</tr>
<tr>
<td>C-1023N</td>
<td>ARO #44129; CP #C-122770; Dotco #2058</td>
</tr>
<tr>
<td>C-1062N</td>
<td>I-R #G140-699; ATS #C-1023N</td>
</tr>
<tr>
<td>C-1091N</td>
<td>Gardner-Denver #10549-525354</td>
</tr>
<tr>
<td>TP10742</td>
<td>Nitto Kohki MAS-20B</td>
</tr>
</tbody>
</table>

Collet Adapters
These adapters permit the use of various mounted wheels or burrs without changing collet chucks. All adapters are made with a shoulder to aid in removal with a minimum of inconvenience.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Replaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-1040-0.0937</td>
<td>1/4&quot; to 3/32&quot;</td>
</tr>
<tr>
<td>C-1040-0.1562</td>
<td>1/4&quot; to 5/32&quot;</td>
</tr>
<tr>
<td>C-1040-0.125</td>
<td>1/4&quot; to 1/8&quot;</td>
</tr>
<tr>
<td>C-1040-0.1875</td>
<td>1/4&quot; to 3/16&quot;</td>
</tr>
<tr>
<td>C-1042</td>
<td>3/8&quot; to 1/4&quot;</td>
</tr>
<tr>
<td>C-1043</td>
<td>1/2&quot; to 3/8&quot;</td>
</tr>
<tr>
<td>C-1044</td>
<td>1/2&quot; to 1/4&quot;</td>
</tr>
<tr>
<td>C-1048</td>
<td>3/8&quot; to 5/16&quot;</td>
</tr>
</tbody>
</table>

See pages 59-60 & 72-73 for additional grinder accessories.
**Extended Arbor Grinders**

**Nippon Pneumatic**

**Straight Collet Grinders**

Lightweight aluminum grinder with narrow housing allows operator access to difficult areas. Ideal for one hand operation. Integrated safety throttle mechanism assures operator safety. **Not equipped with wheel guard.**

6mm collet grinders also available.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>15003420</td>
<td>NHG-65D</td>
<td>NHG-65DLW</td>
<td>NHG-65LD</td>
<td>NHG-65LDLW</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Model No.**

<table>
<thead>
<tr>
<th>Collet Size</th>
<th>Free Speed</th>
<th>Spindle Thread</th>
<th>Throttle Style</th>
<th>Maximum HP</th>
<th>Length</th>
<th>Weight</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHG-65K-20</td>
<td>1/4&quot;</td>
<td>18000 rpm</td>
<td>3/8&quot;-16</td>
<td>Safety Roll</td>
<td>1.0</td>
<td></td>
<td>3/8&quot;</td>
<td>1/4&quot;</td>
<td>19.4 cfm</td>
</tr>
<tr>
<td>NHG-65KLW-20</td>
<td></td>
<td></td>
<td>Safety Lever</td>
<td>Safety Roll</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NHG-65LAULW</td>
<td></td>
<td></td>
<td>Safety Roll</td>
<td>Safety Lever</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Nippon Pneumatic**

**Straight Wheel Grinders**

Ideal for boiler tube applications and grinding or deburring deep, intricate castings. Light, aluminum housing and safety throttle allows for safe, maneuverable grinding. Removes metal fast. **NHG-65D Series equipped with wheel guard. Wheel not included.**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>28100387</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28100390</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28100392</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15003420</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15500050</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TSP-28</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Model No.**

<table>
<thead>
<tr>
<th>Wheel Capacity</th>
<th>Free Speed</th>
<th>Spindle Thread</th>
<th>Throttle Style</th>
<th>Maximum HP</th>
<th>Length</th>
<th>Weight</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHG-65D</td>
<td>2-1/2&quot; x 1/2&quot; x 3/8&quot;</td>
<td>14600 rpm</td>
<td>3/8&quot;-16</td>
<td>Safety Roll</td>
<td>1.0</td>
<td></td>
<td>3/8&quot;</td>
<td>1/4&quot;</td>
<td>19.4 cfm</td>
</tr>
<tr>
<td>NHG-65DLW</td>
<td></td>
<td></td>
<td>Safety Lever</td>
<td>Safety Roll</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NHG-65LD</td>
<td></td>
<td></td>
<td>Safety Roll</td>
<td>Safety Lever</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NHG-65LDLW</td>
<td></td>
<td></td>
<td>Safety Roll</td>
<td>Safety Lever</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NHG-65ALW</td>
<td>2&quot; x 1/2&quot; x 3/8&quot;</td>
<td>18000 rpm</td>
<td>3/8&quot;-16</td>
<td>Safety Lever</td>
<td>1.0</td>
<td></td>
<td>3/8&quot;</td>
<td>1/4&quot;</td>
<td>19.4 cfm</td>
</tr>
<tr>
<td>NHG-65LAULW</td>
<td></td>
<td></td>
<td>Safety Roll</td>
<td>Safety Lever</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

See pages 59-61 & 72-73 for grinder accessories.
The **MP-1012-CWHL** is a small, lightweight, easy to handle grinder. Designed for production grinding of small concave surfaces, especially in close quarters. Ideally used for rotary file burring and for small cone wheel grinding. **1/4” collets available.**

The **MP-1012** is specially designed for radial wheel grinding projects where lightweight and small size are important. Desirable tool for production grinding of small concave surfaces, deep crevices and pockets. **1/4” collets available.**

**MP-1012-BGA12** or **MP-1012-BGA21** grinder with the Port-A-Belt attachment effectively reduces production costs. The Port-A-Belt conforms to convex or concave surfaces and irregular shapes, which results in more uniform contours. Cool running and greater surface contact allows for a finer finish. **Extra belts available. Two models available.** See chart below.

### Specifications

<table>
<thead>
<tr>
<th></th>
<th>MP-1012-CWHL</th>
<th>MP-1012</th>
<th>MP-1012-BGA Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>Cone Wheel</td>
<td>3” x 1/2” (flat wheel)</td>
<td>12” x 1” (belt)</td>
</tr>
<tr>
<td>Free Speed</td>
<td>12000 rpm</td>
<td>12000 rpm</td>
<td>12000 rpm</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Length</td>
<td>11-1/2”</td>
<td>11-1/2”</td>
<td>11-1/2”</td>
</tr>
<tr>
<td>Weight</td>
<td>3.8 lbs.</td>
<td>4.4 lbs.</td>
<td>5.7 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4”</td>
<td>1/4”</td>
<td>1/4”</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>20 cfm</td>
<td>20 cfm</td>
<td>20 cfm</td>
</tr>
</tbody>
</table>

### Port-A-Belt Grinding Attachments

Ideal for sanding concave or convex surfaces. **Available with rubber contact wheel on spindle or on idler. Please specify tool model number or mounting clamp bore diameter.**

<table>
<thead>
<tr>
<th>Accessory for MPT Tool Model</th>
<th>Order Attachment Part No.</th>
<th>Idler Contact Wheel Dia.</th>
<th>Contact Wheel Part No.</th>
<th>Belt Size L x W</th>
<th>Rec’d Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-79000</td>
<td>BGA12-1.250</td>
<td>2”</td>
<td>B8661</td>
<td>12” x 1”</td>
<td>18000 rpm</td>
</tr>
<tr>
<td>MP-1012</td>
<td>BGA12-1.560</td>
<td>2”</td>
<td>B8661</td>
<td>12” x 1”</td>
<td>12000 rpm</td>
</tr>
<tr>
<td>NHG-150</td>
<td>BGA24-2.250</td>
<td>4”</td>
<td>G8629</td>
<td>20” x 2”</td>
<td>6000 rpm</td>
</tr>
</tbody>
</table>

### Extra Belts & Contact Wheels

<table>
<thead>
<tr>
<th>Accessory</th>
<th>Order Attachment Part No.</th>
<th>Spindle Contact Wheel Dia.</th>
<th>Contact Wheel Part No.</th>
<th>Belt Size L x W</th>
<th>Rec’d Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>B8661</td>
<td>Contact Wheel</td>
<td></td>
<td>B8459</td>
<td>12” x 1”</td>
<td>18000 rpm</td>
</tr>
<tr>
<td>G8629</td>
<td>Contact Wheel</td>
<td></td>
<td>B8459</td>
<td>12” x 1”</td>
<td>12000 rpm</td>
</tr>
<tr>
<td>B8459</td>
<td>Contact Wheel</td>
<td></td>
<td>G8440</td>
<td>20” x 2”</td>
<td>6000 rpm</td>
</tr>
<tr>
<td>G8440</td>
<td>Contact Wheel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

See pages 59-61 & 72-73 for grinder accessories.
Wheel Grinders - Industrial

**Michigan Pneumatic** Model MP-79000B - Button Throttle
Model MP-79000L - Lever Throttle

**2" Straight Grinder** - with Guard

Powerful, lightweight grinder designed to ensure easy handling. Ideal for grinding small radius concave surfaces and grinding in confined spaces. Built-in speed regulator is standard. 1/4" collets and belt grinding attachments available. Parts are interchangeable with the ARO 22-Series 2" grinder.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheel Capacity</td>
<td>2&quot; x 1/2&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>18000 rpm</td>
</tr>
<tr>
<td>Spindle Thread</td>
<td>3/8&quot;-24</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>0.7</td>
</tr>
<tr>
<td>Length</td>
<td>12&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>3.25 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;-24</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>15.9 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic** Model MP-9113A-EW

**3" Straight Grinder** - with Guard

Designed for casting cleanup, smoothing welds and burr removal in fabrication shops and shipyards. Features a lightweight aluminum body and side exhaust.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheel Capacity</td>
<td>3&quot; x 1/2&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>18000 rpm</td>
</tr>
<tr>
<td>Spindle Thread</td>
<td>3/8&quot;-24</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>1.00</td>
</tr>
<tr>
<td>Length</td>
<td>13-1/2&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>3.00 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;-24</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>11.9 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic** Model MP-9115-EW

**3" Straight Grinder** - with Guard

Ideal for use in shipyards, refineries and fabrication shops. Features safety lever throttle, side exhaust and steel housing.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheel Capacity</td>
<td>3&quot; x 1/2&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>18000 rpm</td>
</tr>
<tr>
<td>Spindle Thread</td>
<td>3/8&quot;-24</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>1.00</td>
</tr>
<tr>
<td>Length</td>
<td>13-1/2&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>4.00 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;-24</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>11.9 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic** Model MP-2511

**Cone Wheel Grinder**

Designed for production grinding of small concave surfaces, especially in close quarters. Ideally used for rotary file burring and for small cone wheel grinding.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheel Capacity</td>
<td>Cone Wheel</td>
</tr>
<tr>
<td>Speed</td>
<td>12000 rpm</td>
</tr>
<tr>
<td>Spindle Thread</td>
<td>5/8&quot;-11</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>1.50</td>
</tr>
<tr>
<td>Length</td>
<td>18&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>6.75 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>32 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic** Model MP-2

**5" Straight Grinder** - with Guard

Best suited for cleaning castings, removing fins, grinding welds, and buffing sheet metal. Designed to be light and sturdy for effective metal removal. Built-in lubricator and automatic governor provide lifelong dependability.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheel Capacity</td>
<td>5&quot; x 3/4&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>7500 rpm</td>
</tr>
<tr>
<td>Spindle Thread</td>
<td>1/2&quot;-13</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>1.50</td>
</tr>
<tr>
<td>Length</td>
<td>17&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>7.25 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>32 cfm</td>
</tr>
</tbody>
</table>

See pages 59-61 & 72-73 for grinder accessories.
### 4" Straight Grinder - with Guard

High speed straight grinder designed for continuous duty production work in grinding, wire brushing and polishing. Powerful, with a quick acting throttle to provide balanced, easy handling for efficient metal removal. For all industrial applications in foundries and shipyards.

<table>
<thead>
<tr>
<th>Model NHG-100ALW - Safety Lever Throttle</th>
<th>Model NHG-100A - Safety Roll Throttle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheel Capacity: 4&quot; x 5/8&quot;</td>
<td>Length: 15-1/2&quot;</td>
</tr>
<tr>
<td>Free Speed: 9500 rpm</td>
<td>Weight: 5.25 lbs.</td>
</tr>
<tr>
<td>Spindle Thread: 1/2&quot;-13</td>
<td>Air Inlet Thread: 3/8&quot;</td>
</tr>
<tr>
<td>Maximum HP: 1.00</td>
<td>Avg. Air Consumption: 23 cfm</td>
</tr>
</tbody>
</table>

### 5" Straight Grinder - with Guard

Best suited for cleaning castings, removing fins, grinding welds, and buffing sheet metal. Designed to be light and sturdy for effective metal removal. Built-in lubricator and automatic governor provide lifelong dependability.

<table>
<thead>
<tr>
<th>Model NHG-125LW - Safety Lever Throttle</th>
<th>Model NHG-125 - Safety Roll Throttle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheel Capacity: 5&quot; x 3/4&quot;</td>
<td>Length: 17-13/16&quot;</td>
</tr>
<tr>
<td>Free Speed: 7500 rpm</td>
<td>Weight: 7.0 lbs.</td>
</tr>
<tr>
<td>Spindle Thread: 1/2&quot;-12</td>
<td>Air Inlet Thread: 3/8&quot;</td>
</tr>
<tr>
<td>Maximum HP: 1.10</td>
<td>Avg. Air Consumption: 32 cfm</td>
</tr>
</tbody>
</table>

### 6" Straight Grinder - with Guard

Powerful grinders for use with resinoid wheels. Designed to be lightweight for easier handling, and powerful for the heaviest work. Speed regulator provides constant speed according to wheel diameter. Perfect for all industrial applications.

<table>
<thead>
<tr>
<th>Model NHG-150LW - Safety Lever Throttle</th>
<th>Model NHG-150 - Safety Roll Throttle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheel Capacity: 6&quot; x 1&quot;</td>
<td>Length: 17-1/4&quot;</td>
</tr>
<tr>
<td>Free Speed: 6200 rpm</td>
<td>Weight: 9.5 lbs.</td>
</tr>
<tr>
<td>Spindle Thread: 5/8&quot;-11</td>
<td>Air Inlet Thread: 3/8&quot;</td>
</tr>
<tr>
<td>Maximum HP: 2.00</td>
<td>Avg. Air Consumption: 39 cfm</td>
</tr>
</tbody>
</table>

### Michigan Pneumatic

#### Model MP-5666HS

6" Straight Grinder - with Guard

Heavy-duty grinder for cleaning castings, smoothing, finishing, snagging welds, removing scale, rust and weld splatter. Used for a variety of applications in fabrication shops, refineries, foundries, shipyards and steel mills. Features a high force, corrosion resistant governor to retain optimum grinding efficiency. Model MP-5648HS 4500 rpm, 8" horizontal grinder also available.

| Speed: 6000 rpm                        | Length: 20-1/8"                      |
| Wheel Capacity: 6" x 1"                | Weight: 10.5 lbs.                    |
| Spindle Thread: 5/8"-11                | Air Inlet Thread: 1/2"               |
| Maximum HP: 3.00                       | Avg. Air Consumption: 45 cfm         |

#### Model MP-6648HS

8" Straight Grinder - with Guard

Heavy-duty grinder for cleaning castings, smoothing, finishing, snagging welds, removing scale, rust and weld splatter. Used for a variety of applications in fabrication shops, refineries, foundries, shipyards and steel mills. Features an aircraft grade aluminum housing. Model MP-6666HS 6000 rpm, 6" horizontal grinder also available.

| Speed: 4500 rpm                        | Length: 20-7/8"                      |
| Wheel Capacity: 8" x 1"                | Weight: 12.5 lbs.                    |
| Spindle Thread: 5/8"-11                | Air Inlet Thread: 1/2"               |
| Maximum HP: 4.00                       | Avg. Air Consumption: 50 cfm         |
Michigan Pneumatic  
Model MP-250L-ST  
4" Angle Grinder - with Guard

Rugged, lightweight angle grinder for many applications. Removes rust and paint fast. Great for dressing up welds and grinding complex shapes. Features safety lever throttle and governor. Uses 4" x 5/8" hole, type 27, depressed center grinding wheels.

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>4&quot;</td>
<td>9&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>12000 rpm</td>
</tr>
<tr>
<td>Spindle Thread</td>
<td>3/8&quot;-24</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>1.00</td>
</tr>
<tr>
<td>Weight</td>
<td>4.5 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>10 cfm</td>
</tr>
</tbody>
</table>

Wheel not included

Michigan Pneumatic  
Model MP-1FB  
4" Angle Grinder - with Guard

Small, rugged, versatile angle grinder will do a multitude of jobs with minimum operator fatigue. Heavy enough to remain stable, yet light enough to be maneuvered easily around complex shapes. 1/4" collets available for collet grinding. Features safety lever throttle.

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>4&quot;</td>
<td>9&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>12700 rpm</td>
</tr>
<tr>
<td>Spindle Thread</td>
<td>3/8&quot;-24</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>1.00</td>
</tr>
<tr>
<td>Weight</td>
<td>4.5 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>24 cfm</td>
</tr>
</tbody>
</table>

Wheel not included

Michigan Pneumatic  
Model MP-3040  
4" Angle Grinder - with Guard

Ideal for industrial applications including welding shops, foundries, fabrication plants, steel mills and shipyards. Model MP-3040A with aluminum housing and MP-3040-E4 extended angle grinder also available.

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>4&quot;</td>
<td>8&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>13500 rpm</td>
</tr>
<tr>
<td>Spindle Thread</td>
<td>3/8&quot;-24</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>1.00</td>
</tr>
<tr>
<td>Weight</td>
<td>3.125 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>24 cfm</td>
</tr>
</tbody>
</table>

Wheel not included

Michigan Pneumatic  
Model MP-3040-E4  
4" Angle Grinder - with Guard

Rugged 1HP motor angle grinder designed for cleaning, deburring, smoothing and blending. Ideal for foundries, shipyards and fabrication shops. Features adjustable side exhaust. Model MP-3040A-E4 with aluminum motor housing available.

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>4&quot;</td>
<td>8&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>13500 rpm</td>
</tr>
<tr>
<td>Spindle Thread</td>
<td>3/8&quot;-24</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>1.00</td>
</tr>
<tr>
<td>Weight</td>
<td>3.5 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>11.9 cfm</td>
</tr>
</tbody>
</table>

Wheel not included

Michigan Pneumatic  
Model MP-314  
4" Angle Grinder - with Guard

Features a floating rotor design extending the operational life of the tool by reducing wear on critical components. Compact, adjustable angle head is ideal for close quarter applications.

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>4&quot;</td>
<td>10&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>13500 rpm</td>
</tr>
<tr>
<td>Spindle Thread</td>
<td>3/8&quot;-24</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>1.00</td>
</tr>
<tr>
<td>Weight</td>
<td>2.9 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>12 cfm</td>
</tr>
</tbody>
</table>

Wheel not included

See pages 59-61 & 72-73 for grinder accessories.
Right Angle Grinders

Michigan Pneumatic  Model MP-250L-ST58
5" Angle Grinder - with Guard
Durable, right angle grinder used for grinding, deburring and blending. Rugged, lightweight angle grinder for many applications. Removes rust and paint fast. Great for dressing up welds and grinding complex shapes. Features safety lever throttle and governor. **Equipped with 5" guard and dead handle.**

<table>
<thead>
<tr>
<th>Capacity</th>
<th>5&quot;</th>
<th>Length</th>
<th>9&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Speed</td>
<td>12000 rpm</td>
<td>Weight</td>
<td>4.5 lbs.</td>
</tr>
<tr>
<td>Spindle Thread</td>
<td>5/8&quot;-11</td>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>1.00</td>
<td>Avg. Air Consumption</td>
<td>0.87</td>
</tr>
</tbody>
</table>

Michigan Pneumatic  Model MP-1954PS-ST
5" Angle Grinder - with Guard
Features rear exhaust. Lightweight, heavy-duty angle grinder with adjustable swivel guard and reduced vibration dead handle. Change abrasives easier using the integrated spindle lock mechanism. **Equipped with 5" guard and dead handle.**

<table>
<thead>
<tr>
<th>Capacity</th>
<th>5&quot;</th>
<th>Length</th>
<th>9-13/32&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Speed</td>
<td>10000 rpm</td>
<td>Weight</td>
<td>4.4 lbs.</td>
</tr>
<tr>
<td>Spindle Thread</td>
<td>5/8&quot;-11</td>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>0.87</td>
<td>Avg. Air Consumption</td>
<td>4 cfm</td>
</tr>
</tbody>
</table>

Michigan Pneumatic  Model MP-11650
5" Angle Grinder - with Guard
Features adjustable side exhaust. All steel housing with safety lever throttle. Used for grinding, deburring and blending. Features a wick-type lubrication system and spiral beveled gears. **Model MP-11650A with aluminum motor housing available. Equipped with 5" guard and dead handle.**

<table>
<thead>
<tr>
<th>Capacity</th>
<th>5&quot;</th>
<th>Length</th>
<th>7-1/2&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Speed</td>
<td>11000 rpm</td>
<td>Weight</td>
<td>5 lbs.</td>
</tr>
<tr>
<td>Spindle Thread</td>
<td>5/8&quot;-11</td>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>1.00</td>
<td>Avg. Air Consumption</td>
<td>2 cfm</td>
</tr>
</tbody>
</table>

Nippon Pneumatic  Model NAG-11A-U5
5" Angle Grinder - with Guard
Features rear exhaust. Change abrasive in seconds. No more fumbling with multiple wrenches. Simply depress the spindle locking mechanism on top of the housing and remove the abrasive product. Features a left or right hand dead handle, two-step safety lever throttle, and a composite plastic handle. **Equipped with 5" guard and dead handle.**

<table>
<thead>
<tr>
<th>Capacity</th>
<th>5&quot;</th>
<th>Length</th>
<th>9-7/8&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Speed</td>
<td>12000 rpm</td>
<td>Weight</td>
<td>4.5 lbs.</td>
</tr>
<tr>
<td>Spindle Thread</td>
<td>5/8&quot;-11</td>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>0.87</td>
<td>Avg. Air Consumption</td>
<td>28 cfm</td>
</tr>
</tbody>
</table>

Nippon Pneumatic  Model NAG-70ALW
7" Angle Grinder - with Guard
Features side exhaust. Heavy-duty grinder designed for continuous service. Lever type throttle allows operator to run full speed for metal removal or throttle down for delicate work. **Equipped with 7" guard and dead handle.** Model NAG-70ALWSS with 5/8"-11 threaded spindle also available, allowing for the use of type 27 threaded hubs.

<table>
<thead>
<tr>
<th>Capacity</th>
<th>7&quot;</th>
<th>Length</th>
<th>11-1/32&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Speed</td>
<td>7600 rpm</td>
<td>Weight</td>
<td>6.8 lbs.</td>
</tr>
<tr>
<td>Spindle Thread</td>
<td>5/8&quot;-11</td>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>1.30</td>
<td>Avg. Air Consumption</td>
<td>42 cfm</td>
</tr>
</tbody>
</table>

See pages 59-61 & 72-73 for grinder accessories.
Quality beveled gears, ball bearing construction and powerful 1HP motor offer unmatched performance for the toughest sanding/grinding jobs. Lightweight aluminum housing to reduce operator fatigue. Grinding wheel not included.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Capacity</th>
<th>Free Speed</th>
<th>Spindle Thread</th>
<th>Height</th>
<th>Length</th>
<th>Weight</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-6166-ST</td>
<td>7&quot;</td>
<td>2500 rpm</td>
<td>5/8&quot;-11</td>
<td>4&quot;</td>
<td>12&quot;</td>
<td>4.40 lbs.</td>
<td>1/4&quot;</td>
<td>6 cfm</td>
</tr>
<tr>
<td>MP-3765-ST</td>
<td>7&quot;</td>
<td>4500 rpm</td>
<td>5/8&quot;-11</td>
<td>4&quot;</td>
<td>12-3/4&quot;</td>
<td>4.75 lbs.</td>
<td>1/4&quot;</td>
<td>9 cfm</td>
</tr>
<tr>
<td>MP-717-ST</td>
<td>9&quot;</td>
<td>6000 rpm</td>
<td>5/8&quot;-11</td>
<td>4-1/4&quot;</td>
<td>13-1/2&quot;</td>
<td>8.00 lbs.</td>
<td>3/8&quot;</td>
<td>9 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic Model MP-2FA Angle Grinder - with Guard**

Rugged, unusually powerful, heavy-duty tool for steady production grinding. Maintains cutting speed under load. Removes metal fast with less operator effort. Available with cup wheel or wire brush for grinding, or rubber pad for sanding. Model MP-2FA-ROLL with roll type throttle available.

<table>
<thead>
<tr>
<th>Capacity</th>
<th>7&quot;</th>
<th>Length</th>
<th>12-5/8&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Speed</td>
<td>7100 rpm</td>
<td>Weight</td>
<td>9 lbs.</td>
</tr>
<tr>
<td>Spindle Thread</td>
<td>5/8&quot;-11</td>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>1.50</td>
<td>Avg. Air Consumption</td>
<td>42 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic Model MP-2FW Angle Grinder - with Guard**

Powerful heavy-duty grinder designed to withstand the continuous service encountered in plants. Lever type throttle allows operator to throttle down for delicate work or run full speed for maximum metal removal. Equipped with a lever throttle. Available with wire brush. Model MP-2FW-ROLL with roll type throttle available. Optional cup guard also available.

<table>
<thead>
<tr>
<th>Capacity</th>
<th>9&quot;</th>
<th>Length</th>
<th>12-5/8&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Speed</td>
<td>5500 rpm</td>
<td>Weight</td>
<td>9.5 lbs.</td>
</tr>
<tr>
<td>Spindle Thread</td>
<td>5/8&quot;-11</td>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>1.50</td>
<td>Avg. Air Consumption</td>
<td>42 cfm</td>
</tr>
</tbody>
</table>

See pages 72-73 for grinder accessories.
**Specialty Grinders/Sanders**

**Michigan Pneumatic**

**Model MP-2FW-WATER**

Extra Heavy-Duty Water Feed Sander/Grinder

Rugged, unusually powerful, heavy-duty tool for steady production grinding. Maintains cutting speed under load. Removes metal fast with less operator effort. **Wheel not included.**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Capacity</th>
<th>Free Speed</th>
<th>Spindle Thread</th>
<th>Height</th>
<th>Length</th>
<th>Weight</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-1165-WATER</td>
<td>5&quot;</td>
<td>11000 rpm</td>
<td>5/8&quot;-11</td>
<td>4-1/4&quot;</td>
<td>7-1/2&quot;</td>
<td>4.25 lbs.</td>
<td>1/4&quot;</td>
<td>11.9 cfm</td>
</tr>
<tr>
<td>MP-3760-WATER</td>
<td>7&quot;</td>
<td>4500 rpm</td>
<td>5/8&quot;-11</td>
<td>4&quot;</td>
<td>12-3/4&quot;</td>
<td>5.50 lbs.</td>
<td></td>
<td>9.0 cfm</td>
</tr>
<tr>
<td>MP-7170-WATER</td>
<td>7&quot;</td>
<td>6000 rpm</td>
<td>5/8&quot;-11</td>
<td>4-1/4&quot;</td>
<td>13-1/2&quot;</td>
<td>8.75 lbs.</td>
<td></td>
<td>9.0 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic**

**Model MP-2FA-WATER**

Extra Heavy-Duty Water Feed Sander/Grinder

Heavy-duty grinder designed for continuous service. Lever type throttle allows operator to run full speed for metal removal or throttle down for delicate work. **Equipped with dead handle 7" guard and 6 ft. hose with standard water faucet connector. Available with cup wheel or wire brush for grinding, or rubber pad for sanding.**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Capacity</th>
<th>Free Speed</th>
<th>Spindle Thread</th>
<th>Height</th>
<th>Length</th>
<th>Weight</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-3760-WATER</td>
<td>5&quot;</td>
<td>11000 rpm</td>
<td>5/8&quot;-11</td>
<td>4-1/4&quot;</td>
<td>7-1/2&quot;</td>
<td>4.25 lbs.</td>
<td>1/4&quot;</td>
<td>11.9 cfm</td>
</tr>
<tr>
<td>MP-7170-WATER</td>
<td>7&quot;</td>
<td>4500 rpm</td>
<td>5/8&quot;-11</td>
<td>4&quot;</td>
<td>12-3/4&quot;</td>
<td>5.50 lbs.</td>
<td></td>
<td>9.0 cfm</td>
</tr>
<tr>
<td>MP-1165-WATER</td>
<td>7&quot;</td>
<td>6000 rpm</td>
<td>5/8&quot;-11</td>
<td>4-1/4&quot;</td>
<td>13-1/2&quot;</td>
<td>8.75 lbs.</td>
<td></td>
<td>9.0 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic**

**Model MP-2FW-WATER**

Extra Heavy-Duty Water Feed Sander/Grinder

Rugged, unusually powerful, heavy-duty tool for steady production grinding. Maintains cutting speed under load. Removes metal fast with less operator effort. **Equipped with dead handle, 9" guard and 6 ft. hose with standard water faucet connector. Available with cup wheel or wire brush for grinding, or rubber pad for sanding. Model MP-2FWRT-WATER with roll type throttle available.**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Capacity</th>
<th>Free Speed</th>
<th>Spindle Thread</th>
<th>Height</th>
<th>Length</th>
<th>Weight</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-3760-WATER</td>
<td>5&quot;</td>
<td>11000 rpm</td>
<td>5/8&quot;-11</td>
<td>4-1/4&quot;</td>
<td>7-1/2&quot;</td>
<td>4.25 lbs.</td>
<td>1/4&quot;</td>
<td>11.9 cfm</td>
</tr>
<tr>
<td>MP-7170-WATER</td>
<td>7&quot;</td>
<td>4500 rpm</td>
<td>5/8&quot;-11</td>
<td>4&quot;</td>
<td>12-3/4&quot;</td>
<td>5.50 lbs.</td>
<td></td>
<td>9.0 cfm</td>
</tr>
<tr>
<td>MP-1165-WATER</td>
<td>7&quot;</td>
<td>6000 rpm</td>
<td>5/8&quot;-11</td>
<td>4-1/4&quot;</td>
<td>13-1/2&quot;</td>
<td>8.75 lbs.</td>
<td></td>
<td>9.0 cfm</td>
</tr>
</tbody>
</table>

See pages 72-73 for grinder accessories.
**Vertical Grinders**

**Michigan Pneumatic Model MP-5666VSC**

**Vertical Grinder - with Cup Wheel Guard**

Features a high force, corrosion resistant governor to retain optimum grinding efficiency and hardened steel motor parts. Provides heavy-duty grinding for smoothing; finishing, removing scale, rust and weld splatter; cleaning castings and masonry work. Ideal for a variety of applications in fabrication shops, refineries, shipyards, steel mills and construction sites. **MP-5646VSC 4500 rpm, 6” cup wheel grinder also available.**

**Michigan Pneumatic Model MP-5667VS**

**Vertical Grinder - with Guard**

Features include hardened steel motor parts and a high force, corrosion resistant governor to retain optimum grinding efficiency. Ideal for heavy-duty grinding for smoothing; finishing, removing scale, rust and weld splatter; cleaning castings and masonry work. Applications include fabrication shops, refineries, shipyards, steel mills and construction sites.

**Wheel not included**

<table>
<thead>
<tr>
<th>Capacity</th>
<th>6&quot; Cup Wheel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>7-3/4&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>6000 rpm</td>
</tr>
<tr>
<td>Spindle Thread</td>
<td>5/8&quot;-11</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>3.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Capacity</th>
<th>7&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>7-5/8&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>6000 rpm</td>
</tr>
<tr>
<td>Spindle Thread</td>
<td>5/8&quot;-11</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>3.00</td>
</tr>
</tbody>
</table>

**Wheel not included**

**Michigan Pneumatic Model MP-6666VSC**

**Vertical Grinder - with Cup Wheel Guard**

Ideal for fabrication shops, refineries, shipyards, steel mills and construction sites. Features a high force, corrosion resistant governor to retain optimum grinding efficiency and hardened steel motor parts. Provides heavy-duty grinding for smoothing; finishing, removing scale, rust and weld splatter; cleaning castings and masonry work. **MP-6646VSC 4500 rpm, 6” cup wheel grinder also available.**

**Michigan Pneumatic Model MP-6669VS**

**Vertical Grinder - with Guard**

Features a high force, corrosion resistant governor to retain optimum grinding efficiency and hardened steel motor parts. Provides heavy-duty grinding for smoothing; finishing, removing scale, rust and weld splatter; cleaning castings and masonry work. Ideal for a variety of applications in fabrication shops, refineries, shipyards, steel mills and construction sites. **MP-6667VS 7” vertical grinder also available.**

**Wheel not included**

<table>
<thead>
<tr>
<th>Capacity</th>
<th>6&quot; Cup Wheel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>8-5/16&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>6000 rpm</td>
</tr>
<tr>
<td>Spindle Thread</td>
<td>5/8&quot;-11</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>4.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Capacity</th>
<th>9&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>8-3/16&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>6000 rpm</td>
</tr>
<tr>
<td>Spindle Thread</td>
<td>5/8&quot;-11</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>4.00</td>
</tr>
</tbody>
</table>
**Michigan Pneumatic Model MP-5669VS**

**Vertical Grinder** - with Guard

Features include hardened steel motor parts and a high force, corrosion resistant governor to retain optimum grinding efficiency. Ideal for heavy-duty grinding for smoothing; finishing, removing scale, rust and weld splatter; cleaning castings and masonry work. Applications include fabrication shops, refineries, shipyards, steel mills and construction sites.

**Michigan Pneumatic Model MP-B6001M-45**

**Vertical Grinder** - with Cup Wheel Guard

Vertical grinder designed for tough, extra-duty grinding jobs. Outstanding for general clean-up of all size castings, removal of scale, rust or paint by wire brushing and grinding butt welds. Provides maximum power under the worst operating conditions. Lightweight alloy housing allows for easy control and handling. 6" cup wheel guard with butterfly throttle is standard. Optional 9" wheel guard available. Parts are interchangeable with the Master and B&D 601 grinders.

**Michigan Pneumatic Model MP-B3199C-45**

**Vertical Grinder** - with Cup Wheel Guard

Heavy-duty surface grinder designed for continuous production sanding and grinding in industrial plants. Will handle a large variety of surface grinding applications. Ideal for smoothing flat surfaces and cutting down high spots. Lightweight and easy to handle. Parts are interchangeable with the CP Model 319 grinder. Features safety lever throttle.

**Michigan Pneumatic Model MP-B3199CLW-6**

**Vertical Grinder** - with Guard

Best suited for grinding and sanding flat surfaces. Ideal for sheet metal finishing, cleaning and grinding castings, and smoothing welds. Perfect for cup wheel grinding, cup wire brushing and disc sanding. Designed for heavy-duty use. Parts are interchangeable with the CP Model 319 grinder. Features safety lever throttle.

---

**Capacity**................................................................. 6" Cup Wheel
**Free Speed** .................. 4500 rpm
**Spindle Thread** .......... 5/8"-11
**Maximum HP** ................. 2.00

**Capacity**................................................................. 9" Height
**Free Speed** .................. 6000 rpm
**Spindle Thread** .......... 5/8"-11
**Maximum HP** ................. 3.00

**Capacity**................................................................. 6" Cup Wheel
**Free Speed** .................. 4500 rpm
**Spindle Thread** .......... 5/8"-11
**Maximum HP** ................. 3.00

**Capacity**................................................................. 7" Height
**Free Speed** .................. 6000 rpm
**Spindle Thread** .......... 5/8"-11
**Maximum HP** ................. 2.00

See pages 72-73 for grinder accessories.
Grinder & Sander Accessories

Spiralcool Air-Cooled Backing Pads
Spiralcool air cooled pads feature reduced loading and increased disc life. Ideal for all sanding operations on metal, fiberglass and plastics. Flexible or medium grade recommended for contour work and rigid for straight edge work. Fits any sander or grinder with 5/8"-11 thread.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Flexible</th>
<th>Medium</th>
<th>Rigid</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>F400-R</td>
<td>R400-R</td>
<td>H400-R</td>
<td>4&quot;</td>
<td></td>
</tr>
<tr>
<td>F500-R</td>
<td>R500-R</td>
<td>H500-R</td>
<td>5&quot;</td>
<td></td>
</tr>
<tr>
<td>F600-R</td>
<td>R600-R</td>
<td>H600-R</td>
<td>6&quot;</td>
<td></td>
</tr>
<tr>
<td>F700-R</td>
<td>R700-R</td>
<td>H700-R</td>
<td>7&quot;</td>
<td></td>
</tr>
<tr>
<td>F800-R</td>
<td>R800-R</td>
<td>H800-R</td>
<td>8&quot;</td>
<td></td>
</tr>
<tr>
<td>F900-R</td>
<td>R900-R</td>
<td>H900-R</td>
<td>9&quot;</td>
<td></td>
</tr>
</tbody>
</table>

Twist Knotted Cup Brushes
Well suited for use on portable equipment for cleaning and removing rust, scale and paint on flat and contoured surfaces. Flat knot type wire wheels available.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Dia.</th>
<th>Wire Size</th>
<th>Arbor Hole</th>
<th>Trim Length</th>
<th>Max. RPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>03407</td>
<td>4&quot;</td>
<td>.020&quot;</td>
<td>5/8&quot;-11</td>
<td>1-3/8&quot;</td>
<td>9000</td>
</tr>
<tr>
<td>03409</td>
<td>6&quot;</td>
<td>.020&quot;</td>
<td>1-3/4&quot;</td>
<td>6600</td>
<td></td>
</tr>
<tr>
<td>03410</td>
<td>6&quot;</td>
<td>.035&quot;</td>
<td>1-3/4&quot;</td>
<td>6600</td>
<td></td>
</tr>
</tbody>
</table>

Sav-A-Disc Backing Plate
Unique rib design prevents the abrasive disc from loading when grinding results in more than 3 times normal disc wear. Includes 7" and 9" plates.
- Cuts faster
- Results in cool grinding
- Reduces worker fatigue
- Increases disc life
- Patented free wheeling hub
- 5/8"-11 arbor

BP-1 Set

Grinding Wheels with Depressed Center
MPT abrasive grinding wheels are reinforced with fiberglass to ensure safe operation and long life. In use, natural pores are created as the special resinoid fillers are melted by grinding heat, constantly renewing high cutting efficiency.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Diameter “D”</th>
<th>Thick “U”</th>
<th>Hole “H”</th>
<th>RPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>T27-41858</td>
<td>4&quot;</td>
<td>1/8&quot;</td>
<td>5/8&quot;</td>
<td>13500</td>
</tr>
<tr>
<td>T27-41458</td>
<td>4&quot;</td>
<td>1/4&quot;</td>
<td>5/8&quot;</td>
<td>13500</td>
</tr>
<tr>
<td>T27-71878</td>
<td>7&quot;</td>
<td>1/8&quot;</td>
<td>7/8&quot;</td>
<td>8500</td>
</tr>
<tr>
<td>T27-71478</td>
<td>7&quot;</td>
<td>1/4&quot;</td>
<td>7/8&quot;</td>
<td>8500</td>
</tr>
<tr>
<td>T27-91878</td>
<td>9&quot;</td>
<td>1/8&quot;</td>
<td>7/8&quot;</td>
<td>6500</td>
</tr>
<tr>
<td>T27-91478</td>
<td>9&quot;</td>
<td>1/4&quot;</td>
<td>7/8&quot;</td>
<td>6500</td>
</tr>
</tbody>
</table>

Crimped Wire Cup Brushes
Hard working cups with solid ring construction designed for safer brushing action. Very popular in auto body shops for removal of paint and plastic body filler.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Dia.</th>
<th>Wire Size</th>
<th>Arbor Hole</th>
<th>Trim Length</th>
<th>Max. RPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>09551</td>
<td>4&quot;</td>
<td>.020&quot;</td>
<td>5/8&quot;-11</td>
<td>1-1/8&quot;</td>
<td>9000</td>
</tr>
<tr>
<td>09552</td>
<td>5&quot;</td>
<td>.020&quot;</td>
<td>1-1/2&quot;</td>
<td>8000</td>
<td></td>
</tr>
<tr>
<td>09553</td>
<td>6&quot;</td>
<td>.020&quot;</td>
<td>1-1/2&quot;</td>
<td>6600</td>
<td></td>
</tr>
</tbody>
</table>

Type 27 Depressed Center Wheel with Through Hole

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Diameter “D”</th>
<th>Thick “U”</th>
<th>Hole “H”</th>
<th>RPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>20163</td>
<td>4-1/2&quot;</td>
<td>1/4&quot;</td>
<td>5/8&quot;-11</td>
<td>13300</td>
</tr>
<tr>
<td>20173</td>
<td>5&quot;</td>
<td>1/4&quot;</td>
<td>5/8&quot;-11</td>
<td>12200</td>
</tr>
<tr>
<td>20086</td>
<td>7&quot;</td>
<td>1/4&quot;</td>
<td>5/8&quot;-11</td>
<td>8500</td>
</tr>
<tr>
<td>20096</td>
<td>9&quot;</td>
<td>1/4&quot;</td>
<td>5/8&quot;-11</td>
<td>6500</td>
</tr>
</tbody>
</table>

Type 27 Depressed Center Wheel with 5/8"-11 Threaded Hub

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Diameter “D”</th>
<th>Thick “U”</th>
<th>Hole “H”</th>
<th>RPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>03377</td>
<td>3&quot;</td>
<td>.014&quot;</td>
<td>3/8&quot;</td>
<td>11/16&quot;</td>
</tr>
<tr>
<td>03378</td>
<td>4&quot;</td>
<td>.014&quot;</td>
<td>1/2&quot;</td>
<td>7/8&quot;</td>
</tr>
<tr>
<td>03386</td>
<td>6&quot;</td>
<td>.020&quot;</td>
<td>5/8&quot;-1/2&quot;</td>
<td>7/16&quot;</td>
</tr>
<tr>
<td>03426</td>
<td>4&quot;</td>
<td>.014&quot;</td>
<td>5/8&quot;-11</td>
<td>7/8&quot;</td>
</tr>
<tr>
<td>03430</td>
<td>4&quot;</td>
<td>.014&quot;</td>
<td>1/2&quot;-13</td>
<td>7/8&quot;</td>
</tr>
<tr>
<td>03460</td>
<td>4&quot;</td>
<td>.020&quot;</td>
<td>5/8&quot;-11</td>
<td>7/8&quot;</td>
</tr>
</tbody>
</table>

Twist Knot Flat Wire Wheels

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>F400-R</td>
<td>4&quot;</td>
</tr>
<tr>
<td>F500-R</td>
<td>5&quot;</td>
</tr>
<tr>
<td>F600-R</td>
<td>6&quot;</td>
</tr>
<tr>
<td>F700-R</td>
<td>7&quot;</td>
</tr>
<tr>
<td>F800-R</td>
<td>8&quot;</td>
</tr>
<tr>
<td>F900-R</td>
<td>9&quot;</td>
</tr>
</tbody>
</table>

See pages 59-61 & 73 for additional grinder accessories.
Grinder & Sander Accessories

JET Bench Grinders

Designed and manufactured for continuous industrial service. All models feature pre-lubricated and enclosed ball bearings, cast iron wheel guards and dust vents. All models also include adjustable one-piece spark guards, large eye shields and tool rests. **OSHA approved.**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Dimensions</th>
<th>Wheel Size</th>
<th>Motor</th>
<th>Speed</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>JBG-6A</td>
<td>18&quot; x 10-1/2&quot; x 8-1/2&quot;</td>
<td>6&quot; x 3/4&quot; x 1/2&quot;</td>
<td>1/2 HP</td>
<td>3450 rpm</td>
<td>32 lbs.</td>
</tr>
<tr>
<td>JBG-8A</td>
<td>19&quot; x 12-1/2&quot; x 10&quot;</td>
<td>8&quot; x 1&quot; x 5/8&quot;</td>
<td>1 HP</td>
<td>3450 rpm</td>
<td>54 lbs.</td>
</tr>
<tr>
<td>JBG-10A</td>
<td>24-1/2&quot; x 12-1/4&quot; x 13&quot;</td>
<td>10&quot; x 1&quot; x 1&quot;</td>
<td>1-1/2 HP</td>
<td>1725 rpm</td>
<td>110 lbs.</td>
</tr>
</tbody>
</table>

**Cones, Plugs & Cup Wheels**

**Type 16 Plug**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Dia A</th>
<th>Length B</th>
<th>Hole C</th>
<th>RPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>25005</td>
<td>2&quot;</td>
<td>3&quot;</td>
<td>3/8&quot;-24</td>
<td>18100</td>
</tr>
<tr>
<td>25006</td>
<td>2&quot;</td>
<td>3&quot;</td>
<td>5/8&quot;-11</td>
<td></td>
</tr>
</tbody>
</table>

**Type 17 Plug**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Dia A</th>
<th>Length B</th>
<th>Hole C</th>
<th>RPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>25105</td>
<td>2&quot;</td>
<td>3&quot;</td>
<td>3/8&quot;-24</td>
<td>18100</td>
</tr>
<tr>
<td>25106</td>
<td>2&quot;</td>
<td>3&quot;</td>
<td>5/8&quot;-11</td>
<td></td>
</tr>
</tbody>
</table>

**Type 18 Plug**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Dia A</th>
<th>Length B</th>
<th>Hole C</th>
<th>RPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>25205</td>
<td>2&quot;</td>
<td>3&quot;</td>
<td>3/8&quot;-24</td>
<td>18100</td>
</tr>
<tr>
<td>25206</td>
<td>2&quot;</td>
<td>3&quot;</td>
<td>5/8&quot;-11</td>
<td></td>
</tr>
</tbody>
</table>

**Type 18R Plug**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Dia A</th>
<th>Length B</th>
<th>Hole C</th>
<th>RPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>25305</td>
<td>2&quot;</td>
<td>3&quot;</td>
<td>3/8&quot;-24</td>
<td>18100</td>
</tr>
<tr>
<td>25306</td>
<td>2&quot;</td>
<td>3&quot;</td>
<td>5/8&quot;-11</td>
<td></td>
</tr>
</tbody>
</table>

**Abrasive Belts - Aluminum Oxide**

<table>
<thead>
<tr>
<th>Size</th>
<th>Grit</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8&quot; x 13&quot;</td>
<td>40</td>
<td>61122</td>
</tr>
<tr>
<td></td>
<td>60</td>
<td>61124</td>
</tr>
<tr>
<td></td>
<td>80</td>
<td>61125</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>61126</td>
</tr>
<tr>
<td></td>
<td>120</td>
<td>61127</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Size</th>
<th>Grit</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4&quot; x 20-1/2&quot;</td>
<td>40</td>
<td>61029</td>
</tr>
<tr>
<td></td>
<td>60</td>
<td>61031</td>
</tr>
<tr>
<td></td>
<td>80</td>
<td>61032</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>61033</td>
</tr>
<tr>
<td></td>
<td>120</td>
<td>61034</td>
</tr>
<tr>
<td>1-3/16&quot; x 21&quot;</td>
<td>60</td>
<td>TP04084-0</td>
</tr>
<tr>
<td></td>
<td>80</td>
<td>TP04085-0</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>TP04086-0</td>
</tr>
</tbody>
</table>

**Cones, Plugs & Cup Wheels**

**Type 11 Cup Wheel**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Dia A</th>
<th>Length B</th>
<th>Hole C</th>
<th>RPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>26010</td>
<td>5&quot;</td>
<td>6&quot;</td>
<td>5/8&quot;-11</td>
<td>7250</td>
</tr>
<tr>
<td>26020</td>
<td>5&quot;</td>
<td>6&quot;</td>
<td>5/8&quot;-11</td>
<td>6050</td>
</tr>
</tbody>
</table>

**Grinding & Cut-Off Wheels**

**Grinding Type 1 Flat - with Through Hole**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Diameter A</th>
<th>Thick B</th>
<th>Hole C</th>
<th>RPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1-2138</td>
<td>2&quot;</td>
<td>1/2&quot;</td>
<td>3/8&quot;</td>
<td>25000</td>
</tr>
<tr>
<td>T1-21238</td>
<td>2-1/2&quot;</td>
<td>1/2&quot;</td>
<td>3/8&quot;</td>
<td>22000</td>
</tr>
<tr>
<td>T1-45812</td>
<td>4&quot;</td>
<td>5/8&quot;</td>
<td>1/2&quot;</td>
<td>11000</td>
</tr>
<tr>
<td>T1-53412</td>
<td>5&quot;</td>
<td>3/4&quot;</td>
<td>1/2&quot;</td>
<td>9000</td>
</tr>
<tr>
<td>T1-6158</td>
<td>6&quot;</td>
<td>1&quot;</td>
<td>5/8&quot;</td>
<td>6500</td>
</tr>
<tr>
<td>T1-8158</td>
<td>8&quot;</td>
<td>1&quot;</td>
<td>5/8&quot;</td>
<td>7000</td>
</tr>
</tbody>
</table>

**Cut-Off - with Through Hole**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Diameter A</th>
<th>Thick B</th>
<th>Hole C</th>
<th>RPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>F41638</td>
<td>1/16&quot;</td>
<td>3/8&quot;</td>
<td></td>
<td>19000</td>
</tr>
<tr>
<td>F41838</td>
<td>1/8&quot;</td>
<td>3/8&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F41438</td>
<td>1/4&quot;</td>
<td>3/8&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F41858</td>
<td>1/8&quot;</td>
<td>5/8&quot;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional sizes, grit and material belts available.

See pages 59-61 & 72 for additional grinder accessories.
Michigan Pneumatic  Model MP-210-CUT
Utility Cut-Off Tool
Very versatile tool features a metal guard and an OSHA approved safety lever throttle. Cuts through bolts, shackles and steel rods up to 3/4" diameter. Rips through sheet metal with ease. Ideal for auto body and muffler repairs.

122060  Package of 6 Replacement Wheels

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Weight</th>
<th>Free Speed</th>
<th>Air Inlet Thread</th>
<th>Length</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>3&quot;</td>
<td>1.75 lbs.</td>
<td>20000 rpm</td>
<td>1/4&quot;</td>
<td>7-3/4&quot;</td>
<td>5 cfm</td>
</tr>
</tbody>
</table>

Michigan Pneumatic  Model MP-3801A-F
Utility Cut-Off Tool
Heavy-duty shear and grinder in one. Cuts through muffler clamps, hangers, sheet metal and steel rods up to 3/4" thick with ease. Great for auto body repairs. IMPORT MODEL MP-3801-ST available.

122060  Package of 6 Replacement Wheels

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Weight</th>
<th>Free Speed</th>
<th>Air Inlet Thread</th>
<th>Length</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>3&quot;</td>
<td>1.75 lbs.</td>
<td>20000 rpm</td>
<td>1/4&quot;</td>
<td>7&quot;</td>
<td>5 cfm</td>
</tr>
</tbody>
</table>

Diabrade  Model 80-4HD
4" Heavy-Duty Fiberglass Trimmer
Compact, precision saw for the glass-reinforced plastic industry. Fast, powerful cutting with effective dust extraction. Exhaust air is directed away from the operator.

72C4B4  Continuous Rim Blade
72S4B4  Side Spoke Blade
72G4B4  Slotted Blade

<table>
<thead>
<tr>
<th>Blade Diameter</th>
<th>Depth of Cut</th>
<th>Free Speed</th>
<th>Maximum HP</th>
<th>Length</th>
<th>Weight</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>4&quot;</td>
<td>29/32&quot;</td>
<td>12000 rpm</td>
<td>1.00</td>
<td>11&quot;</td>
<td>4.5 lbs.</td>
<td>1/4&quot;</td>
<td>24 cfm</td>
</tr>
</tbody>
</table>

Diabrade  Model 80-5HD
5" Heavy-Duty Fiberglass Trimmer
Ideal saw for the glass-reinforced plastic industry. Dust extraction cowl directs exhaust away from the operator.

72C5B4  Continuous Rim Blade
72S5B4  Side Spoke Blade
72G5B4  Slotted Blade

<table>
<thead>
<tr>
<th>Blade Diameter</th>
<th>Depth of Cut</th>
<th>Free Speed</th>
<th>Maximum HP</th>
<th>Length</th>
<th>Weight</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>5&quot;</td>
<td>1-13/32&quot;</td>
<td>12000 rpm</td>
<td>1.00</td>
<td>11-1/2&quot;</td>
<td>5 lbs.</td>
<td>1/4&quot;</td>
<td>24 cfm</td>
</tr>
</tbody>
</table>

Diabrade  Model 80-7HD15
7" Heavy-Duty Fiberglass Trimmer
Heavy duty trimmer designed for the glass-reinforced plastic industry. Powerful 1.5HP motor allows for fast precision cutting. Dust extraction cowl directs exhaust away from the operator.

72GS7B868  Gulleted Side Spoke Blade

<table>
<thead>
<tr>
<th>Blade Diameter</th>
<th>Depth of Cut</th>
<th>Free Speed</th>
<th>Maximum HP</th>
<th>Length</th>
<th>Weight</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>7&quot;</td>
<td>2&quot;</td>
<td>7100 rpm</td>
<td>1.50</td>
<td>13-3/4&quot;</td>
<td>11.75 lbs.</td>
<td>3/8&quot;</td>
<td>42 cfm</td>
</tr>
</tbody>
</table>

See page 73 for grinder accessories.
**Circular Saw & Rotary Cutters**

**Michigan Pneumatic Model MP-SG0826**

**Circular Saw**

General purpose saw featuring a swiveling saw rest for angled cuts.

- **Blade Diameter**: 4" 
- **Depth of Cut**: 1-1/4" 
- **Free Speed**: 4500 rpm 
- **Maximum HP**: 1.50 
- **Length**: 13-1/4" 
- **Weight**: 2.9 lbs. 
- **Air Inlet Thread**: 1/4" 
- **Avg. Air Consumption**: 16 cfm

**Michigan Pneumatic Model MP-9314A-DD**

**Rotary Cutter**

Features rear exhaust. Panel saw features left or right head cut. Ideal for sheet metal and fiberglass industries. Useful for reaching into narrow corners and holes.

- **Blade Diameter**: 4" 
- **Depth of Cut**: 1-1/4" 
- **Free Speed**: 15000 rpm 
- **Maximum HP**: 1.00 
- **Length**: 18-1/2" 
- **Weight**: 4.4 lbs. 
- **Power**: 110V

**Michigan Pneumatic Model MP-9315U-DD**

**Rotary Cutter** - Electric

Features rear exhaust. Same features as our air rotary cutter. Ideal for automotive repair & sheet metal shops.

- **Blade Diameter**: 4" 
- **Depth of Cut**: 1-1/4" 
- **Free Speed**: 15000 rpm 
- **Maximum HP**: 1.00 
- **Length**: 18-1/2" 
- **Weight**: 4.4 lbs. 
- **Power**: 110V

See page 73 for grinder accessories.
Powerful, lightweight trimmers designed for a variety of applications, including pressing, riveting, bending and plate cutting. Ideal for cutting copper wire and soft materials. Larger units are perfect for cutting plastics, stainless steel and piano wire. Optional blades available.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Copper Wire Capacity</th>
<th>Steel Wire Capacity</th>
<th>Length</th>
<th>Weight</th>
<th>Diameter</th>
<th>Air Inlet</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-AN16</td>
<td>1/16&quot;</td>
<td>-</td>
<td>5-29/32&quot;</td>
<td>7 oz.</td>
<td>1-3/8&quot;</td>
<td>1/8&quot; FPT</td>
</tr>
<tr>
<td>MP-MR3</td>
<td>1/32&quot;</td>
<td>1/64&quot;</td>
<td>4-13/32&quot;</td>
<td>3.2 oz.</td>
<td>25/32&quot;</td>
<td>1/4&quot; MPT</td>
</tr>
<tr>
<td>MP-MR20</td>
<td>7/64&quot;</td>
<td>5/64&quot;</td>
<td>5-19/32&quot;</td>
<td>14 oz.</td>
<td>1-3/4&quot;</td>
<td>1/4&quot; MPT</td>
</tr>
<tr>
<td>MP-MR30-CR8P</td>
<td>9/64&quot;</td>
<td>1/8&quot;</td>
<td>7&quot;</td>
<td>1.50 lbs.</td>
<td>2-1/4&quot;</td>
<td>1/4&quot; MPT</td>
</tr>
<tr>
<td>MP-MP35A-CR8P</td>
<td>3/16&quot;</td>
<td>5/32&quot;</td>
<td>12&quot;</td>
<td>2.63 lbs.</td>
<td>2-1/4&quot;</td>
<td>1/4&quot; MPT</td>
</tr>
<tr>
<td>MP-MR50</td>
<td>15/64&quot;</td>
<td>3/16&quot;</td>
<td>9-19/64&quot;</td>
<td>3.33 lbs.</td>
<td>3&quot;</td>
<td>1/4&quot; MPT</td>
</tr>
<tr>
<td>MP-MP55A-P120</td>
<td>17/64&quot;</td>
<td>15/64&quot;</td>
<td>14-41/64&quot;</td>
<td>6.40 lbs.</td>
<td>3&quot;</td>
<td>1/4&quot; MPT</td>
</tr>
</tbody>
</table>

Optional Blades for Air Nipper/Wire Trimmer

- **P-Type** standard for all models
- **CR-Type** clipper type
- **EP-Type** end cutting type
- **Z-Type** carbide tip
- **FD-Type** for cutting plastics
- **AR-Type** for crimping

### Used in the MP-MR20 Nipper

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CR6</td>
<td>Clipper Blade</td>
</tr>
<tr>
<td>P6</td>
<td>Standard Blade</td>
</tr>
</tbody>
</table>

### Used in the MP-MR30 Nipper

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR8P</td>
<td>Crimping Blade</td>
</tr>
<tr>
<td>CR8P</td>
<td>Clipper Blade</td>
</tr>
<tr>
<td>EP10P</td>
<td>End Cutting Blade</td>
</tr>
<tr>
<td>FD9P</td>
<td>Plastic Cutting Blade</td>
</tr>
<tr>
<td>P8P</td>
<td>Standard Blade</td>
</tr>
<tr>
<td>Z8P</td>
<td>Carbide Tip Blade</td>
</tr>
</tbody>
</table>

### Used in the MP-MR50/MP-MP55A Nipper

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CR120</td>
<td>Clipper Blade</td>
</tr>
<tr>
<td>P120</td>
<td>Standard Blade</td>
</tr>
</tbody>
</table>

### Used in the MP-MR35A Nipper

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR8P</td>
<td>Crimping Blade</td>
</tr>
<tr>
<td>CR8P</td>
<td>Clipper Blade</td>
</tr>
<tr>
<td>EP10P</td>
<td>End Cutting Blade</td>
</tr>
<tr>
<td>FD9P</td>
<td>Plastic Cutting Blade</td>
</tr>
<tr>
<td>P8P</td>
<td>Standard Blade</td>
</tr>
<tr>
<td>Z8P</td>
<td>Carbide Tip Blade</td>
</tr>
</tbody>
</table>
One hand operation makes difficult jobs simple. Ideal for plumbers, carpenters or auto repair technicians for sawing or filing iron, steel, copper, plastic or wood. Cuts straight and curved surfaces in confined places.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Strokes Per Minute</th>
<th>Stroke</th>
<th>Blade Type</th>
<th>Length</th>
<th>Weight</th>
<th>Air Inlet</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-129TW-ST</td>
<td>10000</td>
<td>3/8&quot;</td>
<td>Standard/Scroll</td>
<td>9-1/4&quot;</td>
<td>1.38 lbs.</td>
<td>1/4&quot;</td>
<td>5 cfm</td>
</tr>
<tr>
<td>SSW-110</td>
<td>7000</td>
<td>3/8&quot;</td>
<td>Nitto Style</td>
<td>8-1/2&quot;</td>
<td>1.45 lbs.</td>
<td></td>
<td>9 cfm</td>
</tr>
<tr>
<td>MP-VS</td>
<td>2200</td>
<td>1-1/4&quot;</td>
<td>Standard/Scroll</td>
<td>11-3/8&quot;</td>
<td>3.80 lbs.</td>
<td></td>
<td>5 cfm</td>
</tr>
</tbody>
</table>

Small, lightweight “SuperHand” performs with the power and efficiency of much larger tools. Ideal for filing, descaling, grinding, chamfering and polishing. Great for curves. Extra files and pad assembly available.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>No. of Teeth</th>
<th>Part No.</th>
<th>No. of Teeth</th>
<th>Part No.</th>
<th>No. of Teeth</th>
</tr>
</thead>
<tbody>
<tr>
<td>12110</td>
<td>10</td>
<td>12510</td>
<td>10</td>
<td>13014</td>
<td>14</td>
</tr>
<tr>
<td>12114</td>
<td>14</td>
<td>12514</td>
<td>14</td>
<td>13018</td>
<td>18</td>
</tr>
<tr>
<td>12118</td>
<td>18</td>
<td>12518</td>
<td>18</td>
<td>13024</td>
<td>24</td>
</tr>
<tr>
<td>12124</td>
<td>24</td>
<td>12524</td>
<td>24</td>
<td>13032</td>
<td>32</td>
</tr>
<tr>
<td>12132</td>
<td>32</td>
<td>12532</td>
<td>32</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Minimum quantities of 10 each. Bench files also available.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Speed</th>
<th>Stroke</th>
<th>Shank Diameter</th>
<th>Length</th>
<th>Weight</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-1000A-ST</td>
<td>3700 B/minute</td>
<td>23/64&quot;</td>
<td>1/4&quot;</td>
<td>6-7/8&quot;</td>
<td>2.50 lbs.</td>
<td>8.5 cfm</td>
</tr>
<tr>
<td>SH-100A</td>
<td>3700 B/minute</td>
<td>23/64&quot;</td>
<td>1/4&quot;</td>
<td>6-7/8&quot;</td>
<td>2.50 lbs.</td>
<td>8.5 cfm</td>
</tr>
<tr>
<td>ASH-800</td>
<td>6500 B/minute</td>
<td>5/16&quot;</td>
<td>7/32&quot;</td>
<td>7-1/2&quot;</td>
<td>1.15 lbs.</td>
<td>8.1 cfm</td>
</tr>
</tbody>
</table>

Equipped with 4 different files for all types of work.
Reciprocating Saws & Accessories

Model MP-5-1212-0050 Hacksaw

Designed for service in refineries, chemical plants, utilities, pipelines and heavy industry. Ideal for cutting pipes, tanks and structural steel. Pipes up to 24" diameter can be cut in a single pass. Optional clamps for precise cuts available.

MP-5-1212-0050 Accessories

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>512079910</td>
<td>Pipe Clamp</td>
</tr>
<tr>
<td>512078970</td>
<td>Profile Clamp</td>
</tr>
<tr>
<td>512029960</td>
<td>Pipe Clamp</td>
</tr>
<tr>
<td>CCSG3</td>
<td>4-in-1 Clamp</td>
</tr>
</tbody>
</table>

MP-5-1217-0020 Reciprocating Saw

The perfect tool for sawing up to 4" steel pipe or up to 6" plastic pipe. Ideal for assembly, demolition, pipe repair and pallets. Plunge-in sawing for plastic pipe up to 63" in diameter. Optional clamps available.

Strokes Per Minute........... 1800
Length of Stroke.............. 1-1/8"
Capacity........................ 4"
Maximum HP..................... 1.3

Rec’d Hose Size ............... 1/2"
Weight.......................... 15.4 lbs.
Air Inlet Thread .............. 3/4"
Avg. Air Consumption ......... 51 cfm

MP-5-1217-0020 Accessories

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>563100</td>
<td>Clamp-On Vise</td>
</tr>
<tr>
<td>251259</td>
<td>Pipe Clamp</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>252329</td>
<td>6&quot; Blade, 8 TPI, 5 blades per pack</td>
</tr>
<tr>
<td>251620</td>
<td>8&quot; Blade, 8 TPI, 5 blades per pack</td>
</tr>
<tr>
<td>251259</td>
<td>Pipe Clamp (1/2&quot; - 6&quot; capacity, up to 8&quot; plastic)</td>
</tr>
<tr>
<td>259983</td>
<td>Clamp-On Vise (1/2&quot; - 2&quot; capacity)</td>
</tr>
<tr>
<td>563100</td>
<td>Clamp-On Vise (2-1/2&quot; - 4&quot; capacity)</td>
</tr>
</tbody>
</table>

Additional saw blades available.
Michigan Pneumatic Model MP-51005

Utility Chain Saw

Lightweight, general utility pneumatic chain saw cuts wood and plastic fast. Ideal for applications in chemical plants, utilities, mines and construction.

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blade Length</td>
<td>10&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>228 sfpm</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>1.20</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>4.4 lbs</td>
</tr>
<tr>
<td>Length</td>
<td>20-1/4&quot;</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>30 cfm</td>
</tr>
</tbody>
</table>

Michigan Pneumatic Model MP-51007-25

Utility Chain Saw

Ideal for cutting wood and plastic in polyethylene plants, petro-chemical industries, utilities, underground mines and marine industries. Model MP-51008-25 for underwater applications.

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blade Length</td>
<td>25&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>1900 sfpm</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>4.00</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>20 lbs</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>92 cfm</td>
</tr>
</tbody>
</table>

Michigan Pneumatic Model MP-71773-14

Concrete Chain Saw

Designed to cut through reinforced concrete, stone, concrete pipe and brick. Features die-cast aluminum body for use in harsh environments and a built-in wall-walker for leverage. Model MP-71773-10 with 10" blade length available.

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blade Length</td>
<td>14&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>4900 sfpm</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>6.50</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>21-1/2&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>34 lbs</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>124 cfm</td>
</tr>
</tbody>
</table>

Michigan Pneumatic Model MP-5631-475

Portable Band Saw


<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Width of Cut</td>
<td>4-1/2&quot;</td>
</tr>
<tr>
<td>Max. Depth of Cut</td>
<td>4-3/4&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>220 sfpm</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>0.75</td>
</tr>
<tr>
<td>Length</td>
<td>21-1/2&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>14 lbs</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>20 cfm</td>
</tr>
</tbody>
</table>

Michigan Pneumatic Model MP-5631-725

Portable Band Saw


<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Width of Cut</td>
<td>7&quot;</td>
</tr>
<tr>
<td>Max. Depth of Cut</td>
<td>7&quot;</td>
</tr>
<tr>
<td>Free Speed</td>
<td>295 sfpm</td>
</tr>
<tr>
<td>Maximum HP</td>
<td>1.30</td>
</tr>
<tr>
<td>Length</td>
<td>28-3/4&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>28 lbs</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>43 cfm</td>
</tr>
</tbody>
</table>
Kett Model P-1040

**Pneumatic Metal Shears**

Features a variable speed motor for a smooth, well-balanced grip. Double cut shear easily cuts through 14 gauge mild steel and stainless to 18 gauge without the need to file or deburr. Shears aluminum, tin, steel and plastic with ease. Import Model MP-204-S 18 gauge shear available.

<table>
<thead>
<tr>
<th>Model: P-1040</th>
<th>Shear Head</th>
<th>Center Blade</th>
</tr>
</thead>
<tbody>
<tr>
<td>60-20</td>
<td>40-20</td>
<td>40-21</td>
</tr>
<tr>
<td>60-22L</td>
<td>60-22L</td>
<td>60-22R</td>
</tr>
<tr>
<td>Capacity: 14 Gauge Mild Steel</td>
<td>Length: 10&quot;</td>
<td></td>
</tr>
<tr>
<td>Cutting Speed: 150&quot;/min.</td>
<td>Weight: 3 lbs.</td>
<td></td>
</tr>
<tr>
<td>Maximum Speed: 2500 rpm</td>
<td>Air Inlet Thread: 1/4&quot;</td>
<td></td>
</tr>
</tbody>
</table>

Kett Model P-500

**Pneumatic Metal Shears**

Features double-cutting action to cleanly cut 18 gauge and lighter sheet metal without distortion. A 7/32" waste curl leaves both sides of the cut straight with no need to file or deburr. Variable speed trigger provides speed control. Ideal for the tinner, roofer and auto body shop.

<table>
<thead>
<tr>
<th>Model: P-500</th>
<th>Shear Head</th>
<th>Center Blade</th>
</tr>
</thead>
<tbody>
<tr>
<td>60-20</td>
<td>60-20</td>
<td>60-21</td>
</tr>
<tr>
<td>60-22L</td>
<td>60-22L</td>
<td>60-22R</td>
</tr>
<tr>
<td>Capacity: 18 Gauge Mild Steel</td>
<td>Length: 11&quot;</td>
<td></td>
</tr>
<tr>
<td>Cutting Speed: 150&quot;/min.</td>
<td>Weight: 3 lbs.</td>
<td></td>
</tr>
<tr>
<td>Maximum Speed: 2200 rpm</td>
<td>Air Inlet Thread: 1/4&quot;</td>
<td></td>
</tr>
</tbody>
</table>

Kett Model P-540

**Pneumatic Metal Shears**

For heavier duty applications than the P-500, cutting up to 14 gauge cold-rolled steel. Variable speed trigger lets operator make smooth, easy starting cuts even in most grades of stainless steel up to 16 gauge. Great time saver in any construction company, sheet metal or sign shop.

<table>
<thead>
<tr>
<th>Model: P-540</th>
<th>Shear Head</th>
<th>Center Blade</th>
</tr>
</thead>
<tbody>
<tr>
<td>40-20</td>
<td>40-20</td>
<td>40-21</td>
</tr>
<tr>
<td>60-22L</td>
<td>60-22L</td>
<td>60-22R</td>
</tr>
<tr>
<td>Capacity: 14 Gauge Mild Steel</td>
<td>Length: 11&quot;</td>
<td></td>
</tr>
<tr>
<td>Cutting Speed: 150&quot;/min.</td>
<td>Weight: 4 lbs.</td>
<td></td>
</tr>
<tr>
<td>Maximum Speed: 2200 rpm</td>
<td>Air Inlet Thread: 1/4&quot;</td>
<td></td>
</tr>
</tbody>
</table>

Kett Model KD-200

**Electric Metal Shears - 120 Volt**

Double-cut shears feed quickly and quietly without warping or bending. Easily follows a scribed line. Edges are not hardened or burred to get maximum use of a sheet. Swiping action of blades seals the edge of coated metals. Cut sheet metal in straight or contoured lines and plastic or formica up to 3/32" thick.

<table>
<thead>
<tr>
<th>Model: KD-200</th>
<th>Shear Head</th>
<th>Center Blade</th>
</tr>
</thead>
<tbody>
<tr>
<td>60-20</td>
<td>60-20</td>
<td>60-21</td>
</tr>
<tr>
<td>60-22L</td>
<td>60-22L</td>
<td>60-22R</td>
</tr>
<tr>
<td>Capacity: 18 Gauge Mild Steel</td>
<td>Length: 13-1/2&quot;</td>
<td></td>
</tr>
<tr>
<td>Cutting Speed: 150&quot;/min.</td>
<td>Weight: 4 lbs.</td>
<td></td>
</tr>
<tr>
<td>Maximum Speed: 2500 rpm</td>
<td>Motor: 5.0 Amps</td>
<td></td>
</tr>
</tbody>
</table>

Kett Model KD-440

**Electric Metal Shears - 120 Volt**

Lightweight pistol-grip shear cuts 14 gauge mild steel and stainless up to 16 gauge. Double-insulated, variable-speed motor cuts at over 150 inches per minute, leaving a clean, flat sheet, ready to fabricate. Distortions are absorbed in an easily disposed waste curl, leaving the sheet cool and free of burn, chips or burrs.

<table>
<thead>
<tr>
<th>Model: KD-440</th>
<th>Shear Head</th>
<th>Center Blade</th>
</tr>
</thead>
<tbody>
<tr>
<td>40-20</td>
<td>40-20</td>
<td>40-21</td>
</tr>
<tr>
<td>60-22L</td>
<td>60-22L</td>
<td>60-22R</td>
</tr>
<tr>
<td>Capacity: 14 Gauge Mild Steel</td>
<td>Length: 13-1/2&quot;</td>
<td></td>
</tr>
<tr>
<td>Cutting Speed: 150&quot;/min.</td>
<td>Weight: 5 lbs.</td>
<td></td>
</tr>
<tr>
<td>Maximum Speed: 2500 rpm</td>
<td>Motor: 5 Amps</td>
<td></td>
</tr>
</tbody>
</table>
Kett  Model P-1080
Pneumatic Scissor Shears
Features a new, straight-handled body design for improved control and maneuverability. Easily cuts through pliable materials such as carpet, foam rubber, linoleum and vinyl. Equipped with variable speed motor for fast, accurate work. Truly compact and portable.

<table>
<thead>
<tr>
<th>80-20</th>
<th>Scissor Head</th>
<th>80-21</th>
<th>Scissor Blade</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-22</td>
<td>Stationary Blade</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Capacity | 24 Gauge Mild Steel | Length | 12" |
| Maximum Speed | 2500 rpm | Weight | 3 lbs. |
| Avg. Air Consumption | 4 cfm | Air Inlet Thread | 1/4" |

Kett  Model P-580
Pneumatic Scissor Shears
Cuts a wide range of pliable sheet materials, including carpet and carpet underlay, foam rubber, linoleum, vinyl and woven wood fabric. Large rabbit ear blades funnel thick, soft materials into the scissor jaws without fouling or gouging. Handles heavy foil, light insulated wire, hardware cloth and mesh screening.

<table>
<thead>
<tr>
<th>80-20</th>
<th>Scissor Head</th>
<th>80-21</th>
<th>Scissor Blade</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-22</td>
<td>Stationary Blade</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Capacity | Pliable Materials | Length | 12-1/2" |
| Maximum Speed | 2200 rpm | Weight | 3 lbs. |
| Avg. Air Consumption | 4 cfm | Air Inlet Thread | 1/4" |

Kett  Model P-541
Pneumatic Scissor Shears
Quickly cuts through plastics, wire mesh and rubber with a clean scissors action. When cutting thin coated metals, the swiping cut seals edges to prevent rust and corrosion. Variable speed motor lets operator set the speed of the shears to the work.

<table>
<thead>
<tr>
<th>41-20</th>
<th>Scissor Head</th>
<th>41-21</th>
<th>Scissor Blade</th>
</tr>
</thead>
<tbody>
<tr>
<td>41-22</td>
<td>Stationary Blade</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Capacity | 24 Gauge Mild Steel | Length | 12-1/2" |
| 18 Gauge Wire Mesh | 2200 rpm | Weight | 5 lbs. |
| Avg. Air Consumption | 4 cfm | Air Inlet Thread | 1/4" |

Kett  Model KD-280
Electric Scissor Shears - 120 Volt
Large rabbit ear blades funnel thick, soft materials into the scissor jaws for a clean, flowing cut. Ideal for cutting pliable materials such as vinyl, woven wood, chipboard, foam rubber and linoleum. Also cuts heavy foil, light insulated wire, hardware cloth and light mesh screening. Features stationary bottom blade and single speed motor.

<table>
<thead>
<tr>
<th>80-20</th>
<th>Scissor Head</th>
<th>80-21</th>
<th>Scissor Blade</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-22</td>
<td>Stationary Blade</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Capacity | Pliable Materials | Length | 15-1/2" |
| Maximum Speed | 2500 rpm | Weight | 4 lbs. |
| Motor |                           | 5 Amps |

Kett  Model KD-441
Electric Scissor Shears - 120 Volt
Quickly cuts through plastics, wire mesh and rubber with a clean scissors action. When cutting thin coated metals, the swiping cut seals edges to prevent rust and corrosion. Variable speed motor lets operator set the speed of the shears to the work.

<table>
<thead>
<tr>
<th>41-20</th>
<th>Scissor Head</th>
<th>41-21</th>
<th>Scissor Blade</th>
</tr>
</thead>
<tbody>
<tr>
<td>41-22</td>
<td>Stationary Blade</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Capacity | 24 Gauge Mild Steel | Length | 15-1/2" |
| 18 Gauge Wire Mesh | 2500 rpm | Weight | 5 lbs. |
| Motor |                           | 5 Amps |
Portable Nibblers & Bevelers

Air operated portable nibblers are used where safety is a prime factor, such as oil refineries, chemical plants and other areas where electricity cannot be used due to hazardous conditions. These precisely engineered nibblers cut almost any metal faster, with increased operator efficiency. Designed to produce a clean cut without distortion, leaving an edge requiring only minimal deburring or grinding. These nibblers offer the same metal cutting advantages as electric models. One year warranty.

Michigan Pneumatic  Model MP-5215-ST

Nibbler - Air

Ideal for cutting up to 18 gauge sheet metal in any configuration. Provides a clean, smooth, accurate cut without distortion. Equipped with heavy-duty die cutter and holder. Durable and lightweight for easy handling.

- Capacity: 3/64" Steel
- Weight: 1.875 lbs.
- Free Speed: 4300 rpm
- Length: 7"
- Weight: 6.25 lbs.
- Rec'd Hose Size: 3/8"
- Air Inlet: 1/4"
- Avg. Air Consumption: 31.8 cfm

Michigan Pneumatic  Model MP-711F-ST

Nibbler - Air

Cuts sheet metal in any configuration and holes as small as 1" in diameter without distortion. Great for use with templates. Equipped with adjustable die guide for easy cutting.

- Capacity: 18 Gauge Steel
- Weight: 2 lbs.
- Width of Cut: 7/32"
- Strokes Per Minute: 2600
- Length: 7"
- Weight: 2 lbs.
- Rec'd Hose Size: 3/8"
- Air Inlet: 1/4"
- Avg. Air Consumption: 4 cfm

Nitto Kohki  Model AMB-0307

Mini Beveler - Air

Small beveler for big jobs, such as speedy pipe beveling. Ideal for stainless steel up to 3C. Compact, lightweight tool is ideal for on-site beveling jobs. Pipe outer diameter chamfering kit supplied with tool.

- Capacity: 9/32" C Mild Steel
- Weight: 6.25 lbs.
- Width of Cut: 7/32"
- Strokes Per Minute: 2600
- Length: 7"
- Weight: 1.875 lbs.
- Rec'd Hose Size: 3/8"
- Air Inlet: 1/4"
- Avg. Air Consumption: 31.8 cfm

Trumpf  Model PN-130-0

Profile Nibbler - Electric

- Cuts welded seams and uneven material.
- Extremely maneuverable.
- May be guided in any direction.
- Suitable for interior cutouts.

- Maximum Material Thickness: 0.051"
- Cutting Speed: 10 ft./min.
- Smallest Radius: 0.984"
- Motor Rating: 350 W
- Weight: 3.1 lbs.

Trumpf  Model TKF-1500-1-PLUS

Beveler - Air

- Unsurpassed beveling speed.
- 2-speed motor for stainless steel.
- Prepares plate and pipe for welding.
- Easily adjustable.

- Maximum Material Thickness: 1-1/2"
- Cutting Speed: 4-6 ft./min.
- Bevel Angles: 20°-45°
- Smallest Inner Radius: 2-11/64"
- Weight: 43 lbs.
- Rec’d Hose Size: 5/8"
- Air Inlet: 1/2" MPT
- Avg. Air Consumption: 100 cfm

Larger capacity nibblers also available.
**Trumpf Model C160-5-PLUS**

**Double Cut Shears**

<table>
<thead>
<tr>
<th>Material</th>
<th>Thickness</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild Steel</td>
<td>(0.063&quot;)</td>
<td>16 ga.</td>
</tr>
<tr>
<td>Stainless</td>
<td>(0.047&quot;)</td>
<td>18 ga.</td>
</tr>
<tr>
<td>Aluminum</td>
<td>(0.078&quot;)</td>
<td></td>
</tr>
</tbody>
</table>

**Cutting Speed** 4-6 ft./min.

**Minimum Radius** 3.5"

**Weight** 3.1 lbs.

**Rec’d Hose Size** 3/8"

**Air Inlet** 1/4" MPT

**Avg. Air Consumption** 13 cfm

**Replacement Parts:**
- Cutter (Straight Moving) up to 0.040" 0143432
- Cutter (Curves) to 0.40" 0143434
- Cutter (HSS & Spiral Duct) up to .040" 0934055
- Cutter Set (Fixed) 0913520

ELECTRIC MODEL C160-2-PLUS available.

**Trumpf Model S160-9**

**Light-Duty Shears**

<table>
<thead>
<tr>
<th>Material</th>
<th>Thickness</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild Steel</td>
<td>(0.063&quot;)</td>
<td>16 ga.</td>
</tr>
<tr>
<td>Stainless</td>
<td>(0.040&quot;)</td>
<td>19 ga.</td>
</tr>
<tr>
<td>Aluminum</td>
<td>(0.075&quot;)</td>
<td>14 ga.</td>
</tr>
</tbody>
</table>

**Cutting Speed** 24-36 ft./min.

**Minimum Radius** 0.590"

**Weight** 3.5 lbs.

**Rec’d Hose Size** 3/8"

**Air Inlet** 1/4" MPT

**Avg. Air Consumption** 13 cfm

**Replacement Parts:**
- Cutter (Upper or Lower) 0044502

ELECTRIC MODEL S160-6 available.

**Trumpf Model S250-7**

**Medium-Duty Shears**

<table>
<thead>
<tr>
<th>Material</th>
<th>Thickness</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild Steel</td>
<td>(0.105&quot;)</td>
<td>12 ga.</td>
</tr>
<tr>
<td>Stainless</td>
<td>(0.063&quot;)</td>
<td>16 ga.</td>
</tr>
<tr>
<td>Aluminum</td>
<td>(0.120&quot;)</td>
<td>11 ga.</td>
</tr>
</tbody>
</table>

**Cutting Speed** 13-23 ft./min.

**Minimum Radius** 0.787"

**Weight** 5 lbs.

**Rec’d Hose Size** 3/8"

**Air Inlet** 1/4" MPT

**Avg. Air Consumption** 13 cfm

**Replacement Parts:**
- Cutter (Upper or Lower) 0003946

ELECTRIC MODEL S250-6 available.

**Trumpf Model S350-3**

**Heavy-Duty Shears**

<table>
<thead>
<tr>
<th>Material</th>
<th>Thickness</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild Steel</td>
<td>(0.138&quot;)</td>
<td>10 ga.</td>
</tr>
<tr>
<td>Stainless</td>
<td>(0.075&quot;)</td>
<td>14 ga.</td>
</tr>
<tr>
<td>Aluminum</td>
<td>(0.157&quot;)</td>
<td>9 ga.</td>
</tr>
</tbody>
</table>

**Cutting Speed** 13-20 ft./min.

**Minimum Radius** 1"

**Weight** 14 lbs.

**Rec’d Hose Size** 1/2"

**Air Inlet** 1/2" MPT

**Avg. Air Consumption** 54 cfm

**Replacement Parts:**
- Cutter (mild steel), set of 2 with screws 0140451
- Cutter (stainless), set of 2 with screws 0140452

ELECTRIC MODEL S350-4 available.
120 volt portable electric nibblers are ideal for burr-free metal cutting of straight or curved lines and notching with no distortion of the metal sheet or plate. Tools are perfectly balanced for cutting and operator efficiency. Weighing from 4 to 32 pounds, five different models offer capacities from 14 gauge to 3/8" mild steel. Also available in 220 volt. One year factory warranty.

### Trumpf Model N200-4 Light-Duty Cutting
- Unlimited maneuverability.
- Can be used on corrugated.

<table>
<thead>
<tr>
<th>Material</th>
<th>Thickness</th>
<th>Replacement Parts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild Steel</td>
<td>0.079&quot; (14 ga.)</td>
<td>Punch 0944506</td>
</tr>
<tr>
<td>Stainless</td>
<td>0.040&quot; (19 ga.)</td>
<td>Die (w/ pin &amp; cover) 0980335</td>
</tr>
<tr>
<td>Aluminum</td>
<td>0.100&quot; (12 ga.)</td>
<td></td>
</tr>
</tbody>
</table>

Cutting Speed: 4 ft./min.
Minimum Radius: 0.160"
Weight: 4.6 lbs.

### Trumpf Model N350-4 Medium-Duty Cutting
- Compact, easy handling.
- Tool-free die and punch changing.

<table>
<thead>
<tr>
<th>Material</th>
<th>Thickness</th>
<th>Replacement Parts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild Steel</td>
<td>0.135&quot; (10 ga.)</td>
<td>Punch 0093538</td>
</tr>
<tr>
<td>Stainless</td>
<td>0.090&quot; (15 ga.)</td>
<td>Punch (HSS) 0103545</td>
</tr>
<tr>
<td>Aluminum</td>
<td>0.135&quot; (10 ga.)</td>
<td>Die 0093536</td>
</tr>
</tbody>
</table>

Cutting Speed: 4.5 ft./min.
Minimum Radius: 0.280"
Weight: 7.5 lbs.

### Trumpf Model N500-8 Heavy-Duty Cutting
- Very fast cutting speed.
- Tool-free punch changing.

<table>
<thead>
<tr>
<th>Material</th>
<th>Thickness</th>
<th>Replacement Parts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild Steel</td>
<td>0.197&quot; (6 ga.)</td>
<td>5/P5 Punch 1451224</td>
</tr>
<tr>
<td>Stainless</td>
<td>0.135&quot; (10 ga.)</td>
<td>Die 5 (0.120&quot; to 0.197&quot;) 0975464</td>
</tr>
<tr>
<td>Aluminum</td>
<td>0.276&quot;</td>
<td>Die P5 (90° bends &amp; up to 0.276&quot; alum.) 0975462</td>
</tr>
</tbody>
</table>

Cutting Speed: 3.20 ft./min.
Minimum Radius: 0.300"
Weight: 8.5 lbs.

### Trumpf Model N700-2 Extra Heavy-Duty Cutting
- Light weight and maneuverable for any application.
- Very fast cutting speed.

<table>
<thead>
<tr>
<th>Material</th>
<th>Thickness</th>
<th>Replacement Parts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild Steel</td>
<td>0.276&quot;</td>
<td>2/3 Punch 1453187</td>
</tr>
<tr>
<td>Stainless</td>
<td>0.090&quot; (15 ga.)</td>
<td>Die 3 (0.075&quot; to 0.126&quot;) 0975466</td>
</tr>
<tr>
<td>Aluminum</td>
<td>0.135&quot; (10 ga.)</td>
<td>Die 2 (0.048&quot; to 0.078&quot;) 0975468</td>
</tr>
</tbody>
</table>

Cutting Speed: 5 ft./min.
Minimum Radius: 0.280"
Weight: 18.3 lbs.

### Trumpf Model N1000-0 Super Heavy-Duty Cutting
- Easily resharpened punches and dies.
- 2-speed motor for optimum performance in any application.

<table>
<thead>
<tr>
<th>Material</th>
<th>Thickness</th>
<th>Replacement Parts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild Steel</td>
<td>0.375&quot;</td>
<td>Punch 0112900</td>
</tr>
<tr>
<td>Stainless</td>
<td>0.276&quot;</td>
<td>Punch (HSS) 0120344</td>
</tr>
<tr>
<td>Aluminum</td>
<td>0.500&quot;</td>
<td>Die (0.197&quot; to 0.276&quot;) 0112899</td>
</tr>
</tbody>
</table>

Cutting Speed: Gear 1: 3.25 ft./min. Gear 2: 5.25 ft./min.
Minimum Radius: 0.472" (aluminum)
Weight: 32 lbs.
Air operated portable nibblers are used where safety is a prime factor, such as oil refineries, chemical plants and other areas where electricity cannot be used because of hazardous atmospheres. These nibblers offer the same metal-cutting advantages as the electric models. Weighing from 3.5 to 32 pounds, five different models offer capacities from 14 gauge to 3/8” mild steel. One year factory warranty.

### Trumpf Model N200-7 **Light-Duty Cutting**
- Unlimited maneuverability.
- Can be used on corrugated.

<table>
<thead>
<tr>
<th>Replacement Parts:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Punch</td>
<td>0944506</td>
</tr>
<tr>
<td>Die (w/ pin &amp; cover)</td>
<td>0980335</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gear 1: 3.25 ft./min.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild Steel .............</td>
<td>(0.079”) 14 ga.</td>
</tr>
<tr>
<td>Stainless ..............</td>
<td>(0.040”) 19 ga.</td>
</tr>
<tr>
<td>Aluminum ...............</td>
<td>(0.100”) 12 ga.</td>
</tr>
<tr>
<td>Cutting Speed ..........</td>
<td>4.5 ft./min.</td>
</tr>
<tr>
<td>Minimum Radius ..........</td>
<td>0.160”</td>
</tr>
<tr>
<td>Weight ..................</td>
<td>3.5 lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size ..........</td>
<td>3/8”</td>
</tr>
<tr>
<td>Air Inlet ..............</td>
<td>1/4” MPT</td>
</tr>
<tr>
<td>Avg. Air Consumption ..........</td>
<td>13 cfm</td>
</tr>
</tbody>
</table>

### Trumpf Model N350-3 **Medium-Duty Cutting**
- Extremely maneuverable.
- Lubricator in handle.

<table>
<thead>
<tr>
<th>Replacement Parts:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Punch</td>
<td>0093538</td>
</tr>
<tr>
<td>Punch (HSS)</td>
<td>0103545</td>
</tr>
<tr>
<td>Die</td>
<td>0093536</td>
</tr>
<tr>
<td>Die (HSS)</td>
<td>0103546</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gear 2: 5.25 ft./min.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild Steel .............</td>
<td>(0.135”) 10 ga.</td>
</tr>
<tr>
<td>Stainless ..............</td>
<td>(0.090”) 15 ga.</td>
</tr>
<tr>
<td>Aluminum ...............</td>
<td>(0.135”) 10 ga.</td>
</tr>
<tr>
<td>Cutting Speed ..........</td>
<td>4.5 ft./min.</td>
</tr>
<tr>
<td>Minimum Radius ..........</td>
<td>0.280”</td>
</tr>
<tr>
<td>Weight ..................</td>
<td>10.5 lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size ..........</td>
<td>5/8”</td>
</tr>
<tr>
<td>Air Inlet ..............</td>
<td>1/2” MPT</td>
</tr>
<tr>
<td>Avg. Air Consumption ..........</td>
<td>54 cfm</td>
</tr>
</tbody>
</table>

### Trumpf Model N500-7 **Heavy-Duty Cutting**
- Very fast cutting speed.
- Tool-free punch changing.

<table>
<thead>
<tr>
<th>Replacement Parts:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5/P5 Punch</td>
<td>1451224</td>
</tr>
<tr>
<td>Die 5 (0.120” to 0.197”)</td>
<td>0975464</td>
</tr>
<tr>
<td>Die P5 (90° bends &amp; up to 0.276” aluminum)</td>
<td>0975462</td>
</tr>
<tr>
<td>2/3 Punch</td>
<td>1453187</td>
</tr>
<tr>
<td>Die 3 (0.075” to 0.126”)</td>
<td>0975466</td>
</tr>
<tr>
<td>Die 2 (0.048” to 0.078”)</td>
<td>0975468</td>
</tr>
<tr>
<td>Punch Guide</td>
<td>0975460</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gear 3: 4.5 ft./min.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild Steel .............</td>
<td>(0.098”) 10 ga.</td>
</tr>
<tr>
<td>Stainless ..............</td>
<td>(0.160”) 15 ga.</td>
</tr>
<tr>
<td>Aluminum ...............</td>
<td>(0.135”) 10 ga.</td>
</tr>
<tr>
<td>Cutting Speed ..........</td>
<td>5 ft./min.</td>
</tr>
<tr>
<td>Minimum Radius ..........</td>
<td>0.280”</td>
</tr>
<tr>
<td>Weight ..................</td>
<td>9 lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size ..........</td>
<td>5/8”</td>
</tr>
<tr>
<td>Air Inlet ..............</td>
<td>1/2” MPT</td>
</tr>
<tr>
<td>Avg. Air Consumption ..........</td>
<td>54 cfm</td>
</tr>
</tbody>
</table>

### Trumpf Model N700-1 **Extra Heavy-Duty Cutting**
- Very fast cutting speed.
- Light weight and maneuverable for any application.

<table>
<thead>
<tr>
<th>Replacement Parts:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Punch</td>
<td>0104589</td>
</tr>
<tr>
<td>Punch (HSS)</td>
<td>0104590</td>
</tr>
<tr>
<td>Die 5 (0.118” to 0.197”)</td>
<td>0098723</td>
</tr>
<tr>
<td>Die P5 (90° bends &amp; 0.276” aluminum)</td>
<td>0098722</td>
</tr>
<tr>
<td>2/3 Punch</td>
<td>1453187</td>
</tr>
<tr>
<td>Die 3 (0.075” to 0.126”)</td>
<td>0098721</td>
</tr>
<tr>
<td>Wear Plate</td>
<td>0119173</td>
</tr>
<tr>
<td>Punch Guide</td>
<td>1274571</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gear 4: 4.5 ft./min.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild Steel .............</td>
<td>(0.100”) 10 ga.</td>
</tr>
<tr>
<td>Stainless ..............</td>
<td>(0.090”) 15 ga.</td>
</tr>
<tr>
<td>Aluminum ...............</td>
<td>(0.135”) 10 ga.</td>
</tr>
<tr>
<td>Cutting Speed ..........</td>
<td>5 ft./min.</td>
</tr>
<tr>
<td>Minimum Radius ..........</td>
<td>0.280”</td>
</tr>
<tr>
<td>Weight ..................</td>
<td>27 lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size ..........</td>
<td>5/8”</td>
</tr>
<tr>
<td>Air Inlet ..............</td>
<td>1/2” MPT</td>
</tr>
<tr>
<td>Avg. Air Consumption ..........</td>
<td>100 cfm</td>
</tr>
</tbody>
</table>

### Trumpf Model N1000-1 **Super Heavy-Duty Cutting**
- Easily resharpened punches and dies.
- Adjustable stripper for variable material thickness.

<table>
<thead>
<tr>
<th>Replacement Parts:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Punch</td>
<td>0112900</td>
</tr>
<tr>
<td>Punch (HSS)</td>
<td>0120344</td>
</tr>
<tr>
<td>Die 5 (0.197” to 0.276”)</td>
<td>0112899</td>
</tr>
<tr>
<td>Die P5 (90° bends &amp; 0.394” aluminum)</td>
<td>0112898</td>
</tr>
<tr>
<td>2/3 Punch</td>
<td>0112897</td>
</tr>
<tr>
<td>Die 3 (0.075” to 0.126”)</td>
<td>0112896</td>
</tr>
<tr>
<td>Wear Plate</td>
<td>0112922</td>
</tr>
<tr>
<td>Punch Guide</td>
<td>0112901</td>
</tr>
</tbody>
</table>

### Trumpf Model N1000-1 **Super Heavy-Duty Cutting**
- Easily resharpened punches and dies.
- Adjustable stripper for variable material thickness.

<table>
<thead>
<tr>
<th>Replacement Parts:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Punch</td>
<td>0112900</td>
</tr>
<tr>
<td>Punch (HSS)</td>
<td>0120344</td>
</tr>
<tr>
<td>Die 5 (0.197” to 0.276”)</td>
<td>0112899</td>
</tr>
<tr>
<td>Die P5 (90° bends &amp; 0.394” aluminum)</td>
<td>0112898</td>
</tr>
<tr>
<td>2/3 Punch</td>
<td>0112897</td>
</tr>
<tr>
<td>Die 3 (0.075” to 0.126”)</td>
<td>0112896</td>
</tr>
<tr>
<td>Wear Plate</td>
<td>0112922</td>
</tr>
<tr>
<td>Punch Guide</td>
<td>0112901</td>
</tr>
</tbody>
</table>
**Rivet Diameter**
- Open end rivet

<table>
<thead>
<tr>
<th>Rivet Diameter</th>
<th>PRG510-130</th>
<th>PRG520-33</th>
<th>PRG510A-Plus</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/32&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/32&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/4&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/16&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7/64&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Mandrel**
- Stainless Ultra-Grip

**Nosepieces:**
- PRN414
- PRN514
- PRN614

**POP® Model PRG510A**
**Pneumatic Riveter**
Low cost riveter designed for high speed production, trouble free riveting and easy maintenance. See page 89 for MCS retrofit kit. Model PRG510A-Plus includes a 6 ft. hose, additional nosepieces and an adjusting screw. Model MCS510A with Mandrel Collection System (MCS) also available.

**Nosepieces:**
- Jaw Set
- Jaw Pusher
- Jaw Lube

<table>
<thead>
<tr>
<th>Material</th>
<th>Rivet Diameter</th>
<th>PRG510-130</th>
<th>PRG520-33</th>
<th>PRG510A-Plus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alum.</td>
<td>3/32&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alum.</td>
<td>7/64&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alum.</td>
<td>1/4&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steel</td>
<td>3/16&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monel</td>
<td>7/64&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stainless</td>
<td>1/4&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stainless</td>
<td>3/16&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**POP® Model PRG511A**
**Extended Nose Riveter**
Low cost riveter designed for high speed production, trouble free riveting and easy maintenance. See page 89 for MCS retrofit kit. Model MCSS511A with Mandrel Collection System (MCS) also available.

**Nosepieces:**
- Jaw Set
- Jaw Pusher
- Jaw Lube

<table>
<thead>
<tr>
<th>Material</th>
<th>Rivet Diameter</th>
<th>PRG510-130</th>
<th>PRG520-33</th>
<th>PRG511A-Plus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alum.</td>
<td>3/32&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alum.</td>
<td>7/64&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alum.</td>
<td>1/4&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steel</td>
<td>3/16&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monel</td>
<td>7/64&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stainless</td>
<td>1/4&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stainless</td>
<td>3/16&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**POP® Model PRG540**
**Air/Hydraulic Riveter**
Ideal for high production assembly. World’s most widely used blind riveter, designed to increase productivity. Sets the entire range of rivets. Sets high strength structural 1/4" rivets and 1/4" stainless Ultra-Grip rivets. See page 87 for MCS retrofit kit. 1/4" nosepiece and jaws for additional cost.

**Nosepieces:**
- Jaw Set
- Jaw Pusher
- Jaw Lube

<table>
<thead>
<tr>
<th>Material</th>
<th>Rivet Diameter</th>
<th>PRG540-44</th>
<th>PRG540-46</th>
<th>PRG540-7A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alum.</td>
<td>3/32&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alum.</td>
<td>7/64&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alum.</td>
<td>1/4&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steel</td>
<td>3/16&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monel</td>
<td>7/64&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stainless</td>
<td>1/4&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stainless</td>
<td>3/16&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**POP® Model MCS540**
**Air/Hydraulic Riveter**
Ideal for high production assembly. World’s most widely used blind riveter, designed to increase productivity. Sets the entire range of rivets. Sets high strength structural 1/4" rivets and 1/4" stainless Ultra-Grip rivets. 1/4" nosepiece and jaws for additional cost. Equipped with Mandrel Collection System (MCS).

**Nosepieces:**
- Jaw Set
- Jaw Pusher
- Jaw Lube

<table>
<thead>
<tr>
<th>Material</th>
<th>Rivet Diameter</th>
<th>PRG550-44</th>
<th>PRG550-46</th>
<th>PRG550-7A</th>
<th>PRG550-130</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alum.</td>
<td>3/32&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alum.</td>
<td>7/64&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alum.</td>
<td>1/4&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steel</td>
<td>3/16&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monel</td>
<td>7/64&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stainless</td>
<td>1/4&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stainless</td>
<td>3/16&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Material**
- Stainless
- Alum.
- Steel
- Monel
- Stainless

**Rivet Diameter**
- 3/32" 7/64" 1/4" 3/16" 7/32" 3/8" 1/2" 5/8" 3/4" 1"

**Weight**
- 4.5 lbs.

**Stroke**
- 5/8" 11/16" 1/2" 5/8" 3/4" 1"

**Pulling Force**
- 1000 lbs.

**Pressure**
- 85 psi

**Air Consumption**
- 0.007 cf/rivet

**POP® Model PRG540-44**
**1/4" Jaw Set**

**POP® Model PRG550-44**
**1/4" Jaw Set**

**Weight**
- 4.5 lbs.

**Stroke**
- 11/16" 1/2" 5/8" 3/4" 1"

**Pulling Force**
- 3000 lbs.

**Pressure**
- 85 psi

**Air Consumption**
- 0.022 cf/rivet
**POP® Blind Riveters**

### POP® Model PROSET2500 & PROSET2500MCS

**Air/Hydraulic Riveter**

Mid-range air-hydraulic riveter designed to set blind rivets up to and including 3/16” diameter. Ergonomically engineered with a light trigger for easy one-hand operation. **Model PROSET2500MCS equipped with Mandrel Collection System (MCS).**

<table>
<thead>
<tr>
<th>Rivet Diameter</th>
<th>Mandrel</th>
<th>Nosepieces:</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/16”</td>
<td>- Closed end rivet</td>
<td>ultraGrip</td>
</tr>
</tbody>
</table>

#### MCS Air Consumption:

- **Pressure:** 85 psi
- **Pulling Force:** 878 lbs.
- **Air Consumption:** 0.528 cf/rivet
- **Air Inlet:** 1/4”
- **MCS Air Consumption:** 2.79 cf/rivets

### POP® Model PROSET3400 & PROSET3400MCS

**Air/Hydraulic Riveter**

Capable of setting the entire range of rivets. Sets most 1/4” rivets with a single pull. Lightweight tool allows operator easy maneuverability. **Model PROSET3400MCS equipped with Mandrel Collection System (MCS).**

<table>
<thead>
<tr>
<th>Rivet Diameter</th>
<th>Mandrel</th>
<th>Nosepieces:</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/16”</td>
<td>- Closed end rivet</td>
<td>ultraGrip</td>
</tr>
</tbody>
</table>

#### MCS Air Consumption:

- **Pressure:** 90 psi
- **Pulling Force:** 3400 lbs.
- **Air Consumption:** 0.172 cf/rivet
- **Air Inlet:** 1/4”
- **MCS Air Consumption:** 2.83 acfm

### POP® Model PRT5250A & MCS5250A

**Air/Hydraulic Riveter**

Unique, lightweight, straight lever-operated riveter capable of setting commercial blind rivets up to and including 3/16” diameter. Ideal for assembly line production. **Model MCS5250A equipped with Mandrel Collection System (MCS).**

<table>
<thead>
<tr>
<th>Rivet Diameter</th>
<th>Mandrel</th>
<th>Nosepieces:</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/16”</td>
<td>- Closed end rivet</td>
<td>ultraGrip</td>
</tr>
</tbody>
</table>

#### MCS Air Consumption:

- **Pressure:** 85 psi
- **Pulling Force:** 3400 lbs.
- **Air Consumption:** 0.528 cf/rivet
- **Air Inlet:** 1/4”
- **MCS Air Consumption:** 2.79 cf/rivets

### POP® Model PRT5400 & MCS54000

**Air/Hydraulic Riveter**

Sets most 1/4” rivets with a single pull. Capable of setting the entire range of rivets. Lightweight tool allows operator easy maneuverability. **Model MCS5400 equipped with Mandrel Collection System (MCS).**

<table>
<thead>
<tr>
<th>Rivet Diameter</th>
<th>Mandrel</th>
<th>Nosepieces:</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/16”</td>
<td>- Closed end rivet</td>
<td>ultraGrip</td>
</tr>
</tbody>
</table>

#### MCS Air Consumption:

- **Pressure:** 90 psi
- **Pulling Force:** 3400 lbs.
- **Air Consumption:** 0.172 cf/rivet
- **Air Inlet:** 1/4”
- **MCS Air Consumption:** 2.83 acfm

---

**PRN614**

**PRN514**

**Jaw Lube**

**Jaw Pusher**

**Jaw Set (3pc.)**

**PRN811**

**PRG510-130**

**PRG540-44**

**PRG540-46**

**PRG540-64**

**PRG540-84**

**PRG5500-6**

**PRG5500-8**

**PRG510-130**

**PRG5500-130**

**PRG811**

**Material**

<table>
<thead>
<tr>
<th>Rivet Diameter</th>
<th>Mandrel</th>
<th>T-Rivets</th>
<th>UltraGrip</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alum.</td>
<td>1/8” &amp; 5/32”</td>
<td>1/8” to 3/16”</td>
<td>3/32”</td>
</tr>
<tr>
<td>Stainless</td>
<td>1/8” &amp; 5/32”</td>
<td>1/8” to 3/16”</td>
<td>3/32”</td>
</tr>
</tbody>
</table>

---

**Material**

<table>
<thead>
<tr>
<th>Rivet Diameter</th>
<th>Mandrel</th>
<th>T-Rivets</th>
<th>UltraGrip</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alum.</td>
<td>1/8” &amp; 5/32”</td>
<td>1/8” to 3/16”</td>
<td>3/32”</td>
</tr>
<tr>
<td>Stainless</td>
<td>1/8” &amp; 5/32”</td>
<td>1/8” to 3/16”</td>
<td>3/32”</td>
</tr>
</tbody>
</table>

---

**Material**

<table>
<thead>
<tr>
<th>Rivet Diameter</th>
<th>Mandrel</th>
<th>T-Rivets</th>
<th>UltraGrip</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alum.</td>
<td>1/8” &amp; 5/32”</td>
<td>1/8” to 3/16”</td>
<td>3/32”</td>
</tr>
<tr>
<td>Stainless</td>
<td>1/8” &amp; 5/32”</td>
<td>1/8” to 3/16”</td>
<td>3/32”</td>
</tr>
</tbody>
</table>

---

**Material**

<table>
<thead>
<tr>
<th>Rivet Diameter</th>
<th>Mandrel</th>
<th>T-Rivets</th>
<th>UltraGrip</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alum.</td>
<td>1/8” &amp; 5/32”</td>
<td>1/8” to 3/16”</td>
<td>3/32”</td>
</tr>
<tr>
<td>Stainless</td>
<td>1/8” &amp; 5/32”</td>
<td>1/8” to 3/16”</td>
<td>3/32”</td>
</tr>
</tbody>
</table>
Michigan Pneumatic HCS Series pumps are built to last. Constructed of high quality, industrial grade materials, these pumps can be depended upon for high production assembly work. Heavy steel box with removable front panel for quick inspection. Convenient features include externally adjustable air pressure, top mounted oil filler cap, flush mounted air and hydraulic pressure gauges, and sight glass to monitor oil level. The spring loaded handles allow for easy packing and transportation.

The MPT HCS Series high-volume hydraulic pumps are designed for accurate, repeatable fastener installations once oil pressure and air pressure have been regulated.

These versatile pumps can easily be converted to overhead, suspended pumps for trolley-mounted moving assembly line applications. Other special modifications can be made at additional costs.

Michigan Pneumatic Model MP-HCS-1000HD

**Hydraulic Riveter Pump**

Designed to replace the Chicago Pneumatic Model CP-0805ARDR power rigs. Considerably quieter and faster than any competitive product. Powers all CP pneumatic, riveting and broaching tools such as the CP-503, 505, 505A, 507, 507A and 509A. Comes equipped with an 8 ft. hose and an overhose protector. Longer length hoses available. **Riveter and yoke not included.**

<table>
<thead>
<tr>
<th>Length</th>
<th>18-1/4&quot;</th>
<th>Pressure</th>
<th>7000 psi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width</td>
<td>12-1/4&quot;</td>
<td>Volume</td>
<td>100 cu. in./min.</td>
</tr>
<tr>
<td>Height</td>
<td>22-1/4&quot;</td>
<td>Rec’d Hose Size</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>95 lbs.</td>
<td>Air Inlet Thread</td>
<td>1/2&quot;</td>
</tr>
</tbody>
</table>

Michigan Pneumatic Model MP-7403-ST
Model MP-7503-ST

**Pneumatic/Hydraulic Riveters**


<table>
<thead>
<tr>
<th>Model</th>
<th>MP-7403-ST</th>
<th>MP-7503-ST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>3/16&quot; Steel</td>
<td>1/4&quot; Steel</td>
</tr>
<tr>
<td>Height</td>
<td>10&quot;</td>
<td>13&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>3.25 lbs.</td>
<td>4.625 lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/4&quot;</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>3.5 cfm</td>
<td>4.5 cfm</td>
</tr>
</tbody>
</table>

**POPC® Model PNT800L-PC-T**

**Model PNT1000L-PC-T**

**POPNUT™ Tools**

Lightweight tools designed for installing POP NUT™ blind rivet nuts and other blind threaded inserts utilizing the setting force. Controlling the setting force eliminates application and nut damage due to “double stroking.” **Available with unified or metric threaded mandrel. Sold with one nose assembly of your choice. Please specify.**

<table>
<thead>
<tr>
<th>Model</th>
<th>PNT800L-PC-T</th>
<th>PNT1000L-PC-T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thread Size</td>
<td>8-32 to 3/8&quot;-16</td>
<td>1/4&quot;-20 to 1/2&quot;-13</td>
</tr>
<tr>
<td>Height</td>
<td>10.4&quot;</td>
<td>11.6&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>3.99 lbs.</td>
<td>6.11 lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
</tr>
</tbody>
</table>
**POP® Model PS15**

**Advanced Manual Riveter**

Improved ergonomic hand tool features shorter nose housing, innovative latch design, patented compound link, soft contoured handles, shorter grip opening for easy one-hand operation and a new overall design to minimize friction and improve performance.

---

**POP® Mandrel Collection System**

This vacuum design holds the rivet securely in the nosepiece, even when the tool is pointed down. When the rivet is set, the spent mandrel is instantly propelled into the collection bottle at the rear of the tool. Reduces shop cleanup time, promotes safety, improves product quality, and minimizes downtime.

---

**POP® Model PrOSet® 1600 & ProSet® 1600MCS Air/Hydraulic Riveter**

Features an innovative left or right, On/Off swivel air fitting providing additional flexibility, conserving energy and reducing operating costs. The 1600 will set 2.0 mm Micro Rivets, 3/32" and 1/8" diameter rivets in all materials and up to 5/32" all steel open end rivets.

---

**POP® Model PRH850 Rivetool Corner Head**

Designed for setting “POP” Rivets in restricted areas not accessible for straight riveting. Sets rivets at 90° angle. Excellent for corner assembly. Adaptable to the PRG540 tool only, using PRH850-540 adaptor.

---

**POP® Model MSc5800 Portable/Rechargeable Riveter**

Ideal for site and maintenance work. Useful alongside a moving line or where access to a pneumatic line is impossible. Battery pack has the endurance to set up to 1900 rivets and can be recharged in an hour. Equipped with Mandrel Collection System (MCS).

<table>
<thead>
<tr>
<th>Tool Model No.</th>
<th>Kit No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRG510/PRG511</td>
<td>MCS510-100</td>
</tr>
<tr>
<td>PRG540</td>
<td>MCS540-100</td>
</tr>
<tr>
<td>PRT5200</td>
<td>MCS5200-100</td>
</tr>
<tr>
<td>PRT5400</td>
<td>MCS5400-100</td>
</tr>
</tbody>
</table>

Collector capacity: 500 1/8" rivets; 300 3/16" rivets; 400 5/32" rivets; 100 1/4" rivets

---

**FAR Model RAC180 Model RAC171 Air/Hydraulic Riveter**

Lightweight, ergonomic design features front center swivel air port, push button trigger and vacuum collection system.
The tool shown on this page has been specifically designed to install the A-L, A-K, A-H, A-P and A-O Series Inserts. Select the type of insert (not shown) and thread size required for your application, then select the appropriate RPM tool from the charts below.

PROPER AIR SUPPLY SET-UP REQUIRES:
- Refer to tool selection chart below for proper PSI setting at 25 CFM
- Inline oiler / separator
- Air pressure gauge
- 5/16 minimum hose ID
- 5/16 minimum fittings ID

PREVENTATIVE MAINTENANCE REQUIREMENTS:
- The bearing set must be kept in a WET lubricated condition to assure proper tool operation. AVK suggests the use of high temperature grease such as LUBRIPLATE BRAND 930 AA.
- The tool mandrel should be inspected for thread wear or damage and replaced. AVK suggests the use of Unbrako or Holo-Krome socket head cap screws.

SPECIAL FEATURE — This tool nose cone design incorporates a special pilot / serrated tip that is essential to proper insert installation. The “AK” prefix in the tool part number designates this feature.

### Tool Selection

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Thread Size</th>
<th>RPM</th>
<th>1 Thread Adaption Kit</th>
<th>PSI (Dynamic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AKPT30P632</td>
<td>6-32 UNC</td>
<td>3000</td>
<td>AKPT632TAK</td>
<td>70-80</td>
</tr>
<tr>
<td>AKPT30P832</td>
<td>8-32 UNC</td>
<td>3000</td>
<td>AKPT832TAK</td>
<td>75-90</td>
</tr>
<tr>
<td>AKPT15P1024</td>
<td>10-24 UNC</td>
<td>1500</td>
<td>AKPT1024TAK</td>
<td>60-80</td>
</tr>
<tr>
<td>AKPT10P1032</td>
<td>10-32 UNC</td>
<td>1500</td>
<td>AKPT1032TAK</td>
<td>60-80</td>
</tr>
<tr>
<td>AKPT9P420</td>
<td>1/4*-20 UNC</td>
<td>900</td>
<td>AKPT420TAK</td>
<td>70-90</td>
</tr>
<tr>
<td>AKPT6P518</td>
<td>5/16*-18 UNC</td>
<td>600</td>
<td>AKPT518TAK</td>
<td>80-110</td>
</tr>
<tr>
<td>AKPT6P616</td>
<td>3/8*-16 UNC</td>
<td>600</td>
<td>AKPT616TAK</td>
<td>80-110</td>
</tr>
<tr>
<td>AKPT3P813</td>
<td>1/2*-13 UNC</td>
<td>350</td>
<td>AKPT813TAK</td>
<td>80-110</td>
</tr>
<tr>
<td>AKPT3P470</td>
<td>M4x0.7 ISO</td>
<td>3000</td>
<td>AKPT470TAK</td>
<td>70-80</td>
</tr>
<tr>
<td>AKPT15P580</td>
<td>M5x0.8 ISO</td>
<td>1500</td>
<td>AKPT580TAK</td>
<td>60-80</td>
</tr>
<tr>
<td>AKPT9P610</td>
<td>M6x1.0 ISO</td>
<td>900</td>
<td>AKPT610TAK</td>
<td>70-90</td>
</tr>
<tr>
<td>AKPT6P8125</td>
<td>M8x1.25 ISO</td>
<td>600</td>
<td>AKPT8125TAK</td>
<td>80-110</td>
</tr>
<tr>
<td>AKPT6P1015</td>
<td>M10x1.5 ISO</td>
<td>600</td>
<td>AKPT1015TAK</td>
<td>80-110</td>
</tr>
<tr>
<td>AKPT3P12175</td>
<td>M12x1.75 ISO</td>
<td>350</td>
<td>AKPT12175TAK</td>
<td>80-110</td>
</tr>
</tbody>
</table>

### Spare Parts

<table>
<thead>
<tr>
<th>Hex Drive</th>
<th>2 Mandrel (10 Per Bag)</th>
<th>Bearing Set</th>
<th>Nose Cone</th>
</tr>
</thead>
<tbody>
<tr>
<td>29NPT22</td>
<td>B3SH632-1500</td>
<td>32PT1</td>
<td>77AKPT6</td>
</tr>
<tr>
<td>29NPT23</td>
<td>B3SH32-1500</td>
<td>32PT2</td>
<td>77AKPT8</td>
</tr>
<tr>
<td>29NPT24</td>
<td>B3SH1024-1750</td>
<td>32PT4</td>
<td>77AKPT10</td>
</tr>
<tr>
<td>29NPT25</td>
<td>B3SH1032-1750</td>
<td>32PT4</td>
<td>77AKPT10</td>
</tr>
<tr>
<td>29NPT26</td>
<td>B3SH420-1500</td>
<td>32PT5</td>
<td>77AKPT25</td>
</tr>
<tr>
<td>29NPT27</td>
<td>B3SH518-2000</td>
<td>32PT7</td>
<td>77AKPT3125</td>
</tr>
<tr>
<td>29NPT28</td>
<td>B3SH616-2000</td>
<td>32PT8</td>
<td>77AKPT375</td>
</tr>
<tr>
<td>29NPT29</td>
<td>B3SH813-2500</td>
<td>30NPT500</td>
<td>77AKPT500</td>
</tr>
<tr>
<td>29NPT30</td>
<td>B3SH470-40</td>
<td>32PT3</td>
<td>77AKPT470</td>
</tr>
<tr>
<td>29NPT10</td>
<td>B3SH580-45</td>
<td>32PT4</td>
<td>77AKPT580</td>
</tr>
<tr>
<td>29NPT11</td>
<td>B3SH610-40</td>
<td>32PT6</td>
<td>77AKPT610</td>
</tr>
<tr>
<td>29NPT12</td>
<td>B3SH8125-50</td>
<td>32PT7</td>
<td>77AKPT8125</td>
</tr>
<tr>
<td>29NPT25</td>
<td>B3SH1015-50</td>
<td>32PT10</td>
<td>77AKPT1015</td>
</tr>
<tr>
<td>29NPT27</td>
<td>B3SH12175-60</td>
<td>30NPT500</td>
<td>77AKPT1M12</td>
</tr>
</tbody>
</table>

Note: UNF Fine Threads are Available  
2 Special order only
**Miscellaneous Tools**

**Michigan Pneumatic**

**Punch/Flange Tools**

Two-in-one quarter-paneling tool is ideal for crimping or flanging panels together. Also great for punching clean holes for any operation.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Punch Capacity</th>
<th>Flange Capacity</th>
<th>Weight</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-AP600PT-A</td>
<td>3/16” Hole</td>
<td>14 gauge</td>
<td>2.25 lbs.</td>
<td>3/8”</td>
<td>1/4”</td>
<td>4 cfm</td>
</tr>
<tr>
<td>MP-AP650-ST</td>
<td>3/16” Hole</td>
<td>14 gauge</td>
<td>2.70 lbs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP-AP600ST8</td>
<td>5/16” Hole</td>
<td>14 gauge</td>
<td>3.00 lbs.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Miscellaneous Tools**

**Michigan Pneumatic**

**Punch/Flange Tool Kit**

Two-in-one quarter-paneling tool is ideal for crimping or flanging panels together. Also great for punching clean holes for any operation. Includes plastic case, one flange head, and 4 punch heads (Sizes 4, 5, 6.5, & 8mm).

**Engraving Pen**

Writes on a variety of materials such as steel up to RC-64, glass, plastic, and wood. Can be used for deburring and trimming, and is excellent for removing broken studs. A must for paleontologists and aircraft parts manufacturers. Includes hose, filter, #7177 stylus and plastic carrying case.

**Paint Spray Gun**

High production spray gun designed to handle all lacquers, enamels, and any automotive refinishing materials.

**Michigan Pneumatic**

**Model MP-9361**

**Model MP-9100**

**Carbide Tip Stylus**

#7177

**Solid Carbide Stylus Kit**

#84625

Includes: 1 Solid Carbide Stylus, 2 O-rings, 1 Special Guide

**Chisel Kit (MP-9361 only)**

#7425

Includes: 1 each Wide Chisel, Blank Chisel, Cape Chisel & Anvil

**Michigan Pneumatic**

**Model MP-AS8-ST**

**Feed Type** ................. Suction

**Fluid Nozzle Size** .............. 5/8”

**Cup Capacity** ................... 1 Quart

**Height** .......................... 11-1/2”

**Length** .......................... 5”

**Weight** .......................... 2.3 lbs.

**Rec’d Hose Size** .............. 3/8”

**Air Inlet Thread** ............ 1/4”

**Avg. Air Consumption** ........ 8 cfm
Michigan Pneumatic

“Alligator” Yoke Riveters

Alligator type compression riveter has wide applications in many industries for squeezing a large variety of size and type of rivets. Strong squeeze action is easily controlled to provide uniformity and accuracy of work. Ideally used for dimpling, punching and pressing. Extra powerful, portable tandem cylinder also available with double the compressive force for larger riveting capacity. Parts are interchangeable with Chicago Pneumatic 0214-A series riveters.

**Compression Riveters, “Alligator” Yoke**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Rivet Capacity</th>
<th>Yoke Reach</th>
<th>Yoke Gap</th>
<th>Closed Height</th>
<th>Shank Diameter</th>
<th>Max. Force</th>
<th>Max. Travel</th>
<th>Length</th>
<th>Weight w/Yoke</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-2144A-112</td>
<td>1/8”</td>
<td>1-1/2”</td>
<td>1-5/8”</td>
<td>7/8”</td>
<td>0.187”</td>
<td>3000 lbs.</td>
<td>5/8”</td>
<td>9-3/16”</td>
<td>3.75 lbs.</td>
</tr>
<tr>
<td>MP-2144A-214</td>
<td>1/8”</td>
<td>2-1/4”</td>
<td>2-1/8”</td>
<td>7/8”</td>
<td>0.187”</td>
<td>2200 lbs.</td>
<td>7/8”</td>
<td>10-1/8”</td>
<td>4.25 lbs.</td>
</tr>
<tr>
<td>MP-2144A-3</td>
<td>3/32”</td>
<td>3”</td>
<td>1-5/8”</td>
<td>7/8”</td>
<td>0.187”</td>
<td>1800 lbs.</td>
<td>1-1/4”</td>
<td>10-7/8”</td>
<td>4.75 lbs.</td>
</tr>
</tbody>
</table>

**Tandem Compression Riveters, “Alligator” Yoke**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Rivet Capacity</th>
<th>Yoke Reach</th>
<th>Yoke Gap</th>
<th>Closed Height</th>
<th>Shank Diameter</th>
<th>Max. Force</th>
<th>Max. Travel</th>
<th>Length</th>
<th>Weight w/Yoke</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-2144A-TAN-112</td>
<td>3/16”</td>
<td>1-1/2”</td>
<td>1-5/8”</td>
<td>7/8”</td>
<td>0.187”</td>
<td>6000 lbs.</td>
<td>5/8”</td>
<td>12”</td>
<td>5.50 lbs.</td>
</tr>
<tr>
<td>MP-2144A-TAN-214</td>
<td>5/32”</td>
<td>2-1/4”</td>
<td>2-1/8”</td>
<td>7/8”</td>
<td>0.187”</td>
<td>4300 lbs.</td>
<td>7/8”</td>
<td>13”</td>
<td>6.00 lbs.</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic**

“C” Yoke Riveters

Specially designed for airplane construction to ensure fast, economical riveting where two-man operation is impractical. Features strong, steady, silent squeeze action, which is easily controlled for a large variety of rivets. Ideal for dimpling, punching, stamping and pressing. Widely used for truck, bus and automotive applications. Extra powerful, portable tandem cylinder also available with double the compressive force for larger riveting capacity. Parts are interchangeable with Chicago Pneumatic 0214-C series riveters.

**Compression Riveters, “C” Yoke**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Rivet Capacity</th>
<th>Yoke Reach</th>
<th>Yoke Gap</th>
<th>Closed Height</th>
<th>Shank Diameter</th>
<th>Max. Force</th>
<th>Max. Travel</th>
<th>Length</th>
<th>Weight w/Yoke</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-2144C-112</td>
<td>1/8”</td>
<td>1-1/2”</td>
<td>1-1/4”</td>
<td>11/16”</td>
<td>0.187”</td>
<td>3000 lbs.</td>
<td>9/16”</td>
<td>10-5/16”</td>
<td>4.5 lbs.</td>
</tr>
<tr>
<td>MP-2144C-2</td>
<td>3/32”</td>
<td>2-1/2”</td>
<td>3”</td>
<td>1-1/4”</td>
<td>0.187”</td>
<td>6000 lbs.</td>
<td>9/16”</td>
<td>14”</td>
<td>5.5 lbs.</td>
</tr>
</tbody>
</table>

**Tandem Compression Riveters, “C” Yoke**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Rivet Capacity</th>
<th>Yoke Reach</th>
<th>Yoke Gap</th>
<th>Closed Height</th>
<th>Shank Diameter</th>
<th>Max. Force</th>
<th>Max. Travel</th>
<th>Length</th>
<th>Weight w/Yoke</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-2144C-TAN-112</td>
<td>3/16”</td>
<td>1-1/2”</td>
<td>1-1/4”</td>
<td>11/16”</td>
<td>0.187”</td>
<td>6000 lbs.</td>
<td>9/16”</td>
<td>14”</td>
<td>5.5 lbs.</td>
</tr>
<tr>
<td>MP-2144C-TAN-212</td>
<td>5/32”</td>
<td>2-1/2”</td>
<td>3”</td>
<td>1-1/4”</td>
<td>0.187”</td>
<td>6000 lbs.</td>
<td>9/16”</td>
<td>14”</td>
<td>5.5 lbs.</td>
</tr>
<tr>
<td>MP-2144C-TAN-3</td>
<td>1/8”</td>
<td>3/32”</td>
<td>2-1/2”</td>
<td>3”</td>
<td>0.187”</td>
<td>6000 lbs.</td>
<td>9/16”</td>
<td>14”</td>
<td>5.5 lbs.</td>
</tr>
</tbody>
</table>

Other yokes also available. See pages 94-97 for accessories.
Rivet Squeezers

Michigan Pneumatic

“Alligator” Yoke Riveters

Designed for one-man operation to increase productivity where costly two-man riveting was once done. Used in high volume riveting applications. Capable of accurately squeezing a large variety of solid, tubular and semi-tubular rivets in aircraft, truck, bus, boat, toy and automotive component applications. A tandem cylinder doubles the compressive force of the standard tool, allowing the operator to upset larger size rivets, as well as rivets made of stronger material. All models: Plain backhead; 1/4” (NPTF) air inlet thread. MP-351: Short stroke adjustment; CR-1 rivet shank holes. Model 351FCT08 foot pedal control available.

Compression Riveters, “Alligator” Yoke

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Rivet Capacity</th>
<th>Yoke Reach</th>
<th>Yoke Gap</th>
<th>Closed Height</th>
<th>Shank Diameter</th>
<th>Max. Force</th>
<th>Max. Travel</th>
<th>Length</th>
<th>Weight w/Yoke</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-351A-278</td>
<td>5/32&quot; Alum.</td>
<td>1/8&quot;</td>
<td>2-7/8&quot;</td>
<td>1-5/8&quot;</td>
<td>7/8&quot;</td>
<td>5200 lbs.</td>
<td>5/8&quot;</td>
<td>19-1/2&quot;</td>
<td>15.75 lbs.</td>
</tr>
</tbody>
</table>

Tandem Compression Riveters, “Alligator” Yoke

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Rivet Capacity</th>
<th>Yoke Reach</th>
<th>Yoke Gap</th>
<th>Closed Height</th>
<th>Shank Diameter</th>
<th>Max. Force</th>
<th>Max. Travel</th>
<th>Length</th>
<th>Weight w/Yoke</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-351A-TAN-918</td>
<td>3/16&quot; Alum.</td>
<td>5/32&quot;</td>
<td>9-1/8&quot;</td>
<td>2-3/16&quot;</td>
<td>3/4&quot;</td>
<td>6000 lbs.</td>
<td>1-11/16&quot;</td>
<td>30&quot;</td>
<td>29.00 lbs.</td>
</tr>
<tr>
<td>MP-351A-TAN-7</td>
<td>3/16&quot; Alum.</td>
<td>5/32&quot;</td>
<td>7&quot;</td>
<td>2&quot;</td>
<td>1-1/2&quot;</td>
<td>6000 lbs.</td>
<td>1-11/16&quot;</td>
<td>27-7/8&quot;</td>
<td>27.00 lbs.</td>
</tr>
<tr>
<td>MP-351A-TAN-278</td>
<td>1/4&quot; Alum.</td>
<td>3/16&quot;</td>
<td>2-7/8&quot;</td>
<td>1-5/8&quot;</td>
<td>7/8&quot;</td>
<td>10400 lbs.</td>
<td>5/8&quot;</td>
<td>23-3/4&quot;</td>
<td>18.50 lbs.</td>
</tr>
</tbody>
</table>

Michigan Pneumatic

“C” Yoke Riveters

Lightweight, compact, used extensively in electronic chassis, metal furniture, aircraft, automotive component, boat, truck and bus building applications. Can also be used for staking, stamping, pressing or crimping service. Air inlet swivel aids maneuverability. Squeezes uniformly every time trigger is actuated, independent of operator skill. Using a compressing tool ensures all joints are of the highest integrity. All models: Plain backhead; 1/4” (NPTF) air inlet thread. CR-1 rivet shank holes; MP-351: Short stroke adjustment. Model 351FCT08 foot pedal control available.

Compression Riveters, “C” Yoke

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Rivet Capacity</th>
<th>Yoke Reach</th>
<th>Yoke Gap</th>
<th>Closed Height</th>
<th>Shank Diameter</th>
<th>Max. Force</th>
<th>Max. Travel</th>
<th>Length</th>
<th>Weight w/Yoke</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-351C-218</td>
<td>3/16&quot; Alum.</td>
<td>5/32&quot;</td>
<td>2-1/8&quot;</td>
<td>1-3/16&quot;</td>
<td>25/32&quot;</td>
<td>6000 lbs.</td>
<td>9/16&quot;</td>
<td>17-1/2&quot;</td>
<td>12.50 lbs.</td>
</tr>
</tbody>
</table>

Tandem Compression Riveters, “C” Yoke

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Rivet Capacity</th>
<th>Yoke Reach</th>
<th>Yoke Gap</th>
<th>Closed Height</th>
<th>Shank Diameter</th>
<th>Max. Force</th>
<th>Max. Travel</th>
<th>Length</th>
<th>Weight w/Yoke</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-351C-TAN-218</td>
<td>1/4&quot; Alum.</td>
<td>7/32&quot;</td>
<td>2-1/8&quot;</td>
<td>1-3/16&quot;</td>
<td>25/32&quot;</td>
<td>12000 lbs.</td>
<td>9/16&quot;</td>
<td>21-3/4&quot;</td>
<td>15.25 lbs.</td>
</tr>
</tbody>
</table>

Other yokes also available. See pages 94-97 for accessories.
Rivet Squeezer Accessories

**MP-351C & CP-0351 Series “C” Yokes**
Fits standard Type 1 frame.

<table>
<thead>
<tr>
<th>No.</th>
<th>Reach</th>
<th>Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>016</td>
<td>1-3/16&quot;</td>
<td>2-5/8&quot;</td>
</tr>
<tr>
<td>017</td>
<td>3-1/2&quot;</td>
<td>1-1/4&quot;</td>
</tr>
<tr>
<td>018</td>
<td>2&quot;</td>
<td>2&quot;</td>
</tr>
<tr>
<td>019</td>
<td>5&quot;</td>
<td>2-1/2&quot;</td>
</tr>
<tr>
<td>020</td>
<td>2-1/8&quot;</td>
<td>1-3/16&quot;</td>
</tr>
</tbody>
</table>

**CP-0355 Series “C” Yokes**
Includes bronze set holder bushings.

<table>
<thead>
<tr>
<th>No.</th>
<th>Reach</th>
<th>Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>P089777</td>
<td>2-1/8&quot;</td>
<td>1-7/8&quot;</td>
</tr>
<tr>
<td>P093213</td>
<td>4-1/2&quot;</td>
<td>1-15/16&quot;</td>
</tr>
</tbody>
</table>

**MP-2144C & CP-0214 Series “C” Yokes**

<table>
<thead>
<tr>
<th>No.</th>
<th>Reach</th>
<th>Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>1-1/2&quot;</td>
<td>1-1/4&quot;</td>
</tr>
<tr>
<td>002</td>
<td>2&quot;</td>
<td>1-1/4&quot;</td>
</tr>
<tr>
<td>003</td>
<td>2-1/2&quot;</td>
<td>1-3/8&quot;</td>
</tr>
<tr>
<td>004</td>
<td>3&quot;</td>
<td>1-3/8&quot;</td>
</tr>
<tr>
<td>005</td>
<td>2-3/4&quot;</td>
<td>1-3/16&quot;</td>
</tr>
<tr>
<td>006</td>
<td>1-3/4&quot;</td>
<td>1-3/16&quot;</td>
</tr>
<tr>
<td>007</td>
<td>1-3/16&quot;</td>
<td>1-3/16&quot;</td>
</tr>
<tr>
<td>012XP</td>
<td>3&quot;</td>
<td>1-1/2&quot;</td>
</tr>
</tbody>
</table>

**Heavy-Duty Model**

<table>
<thead>
<tr>
<th>No.</th>
<th>Reach</th>
<th>Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>008</td>
<td>3-7/8&quot;</td>
<td>1-3/16&quot;</td>
</tr>
<tr>
<td>009</td>
<td>5-5/8&quot;</td>
<td>1-3/16&quot;</td>
</tr>
<tr>
<td>010</td>
<td>5-3/8&quot;</td>
<td>1-1/4&quot;</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic Model 351CON Riveter Conversion Unit**
Conversion unit fits all “Alligator” or “C” type models MP-351 and CP-0351 compression riveters. Increases rivet capacity from 3/16” Dural to 5/16”, and 5/32” steel to 1/4”.

**Michigan Pneumatic Model 351RY Roof Top Rail Yoke**
Fits MP-351 and CP-0351 “C” series riveters with Type 1 frames. Ideal for installing 3/16” and 1/4” rivets on most tractor trailer roof rails. Requires at least SM210 flush set for the top of yoke and choice of additional cupped rivet set to be inserted in the moving set holder.

- **P003092RY** 5/16”-24 Bolt
- **P073047RY** 7/16”-20 Bolt
- **P003093** 5/16”-24 Nylock Nut
- **P006315** 7/16”-20 Nylock Nut

See pages 95-97 for additional accessories.
Rivet Squeezer Accessories

Air-Operated Pedal Control
Converts standard lever-operated compression riveters to foot-operated for riveting applications where both hands are required to stabilize the product being riveted.

**Michigan Pneumatic** Model P078666G
Cable-Operated Pedal Control
Allows standard lever-operated CP-0450 compression riveters to foot-operated applications requiring two hands. Includes lever conversion kit.

- **Model** 2144FCT
  - Can be installed on the following model riveters: MP-2144, CP-0214, USI-114 and other riveters of the same design.
  - Includes a 6' hose assembly from the foot pedal to the back cap.
- **Model** 351FCT08
  - Can be installed on the following model riveters: MP-351, CP-0351, USI-151 and APT-740.
  - Includes an 8' hose assembly from the foot pedal to the air valve and air intake.

**Michigan Pneumatic** Model P078214G
Cable-Operated Pedal Control
Allows standard lever-operated CP-0351 & CP-0355 compression riveters to foot-operated applications requiring two hands.

- **Model** 2144G
  - Can be installed on the following model riveters: CP-0450 and USI-150.
  - Comes with a 10' hose assembly from the foot pedal to the air valve and a 5' hose assembly from the air valve to the back cap. Includes all necessary hardware to mount the air valve and back cap.
- **Model** 450FCT
  - Can be installed on the following model riveters: CP-0450EA, USI-150EA and Zephyr ZP450EA.
  - Comes with a 10' hose assembly from the foot pedal to the air valve and a 5' hose assembly from the air valve to the back cap. Includes all necessary hardware to mount the air valve and back cap.

See pages 94 & 96-97 for additional accessories.
Rivet Squeezer Accessories

Michigan Pneumatic Model 2144APS
Air-Operated, Foot-Controlled Pedestal Stand
The 2144APS Pedestal Stand is used with the MP-2144, CP-214, or U.S. 114 Compression Riveters. This Bench Top Stand comes with the 2144FCT Air Foot Pedal Control Assembly that has a 6 ft. hose and has a working height of 12". This provides a hands-free option where components require both hands for stability.

Michigan Pneumatic Model 351APS
Air-Operated, Foot-Controlled Pedestal Stand
The 351APS pedestal stand is used with the CP-0351, U.S. 151, or APT 740 Compression Riveters. This stand comes with the 351FCT08 Air Foot Pedal Control Assembly that has 8 ft. hoses and has a working height of 41". This provides a hands-free option where components require both hands for stability.

Michigan Pneumatic CP-0450 Pressure Pad Dolly
Michigan Pneumatic CP-0450EA Shank Adapters
Allows standard CP-0450EA riveter to accept MP-351 & CP-0351 rivet squeezer rivet sets.

Michigan Pneumatic CP-0450EA Flush Sets

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>P078691</td>
<td>3/8&quot; Pressure Pad Dolly</td>
</tr>
<tr>
<td>P078692</td>
<td>1/2&quot; Pressure Pad Dolly</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>P081392</td>
<td>0.1875&quot; Shank adapter</td>
</tr>
<tr>
<td>P081393</td>
<td>0.250&quot; Shank Adapter</td>
</tr>
<tr>
<td>P082189</td>
<td>0.3125&quot; Shank Adapter</td>
</tr>
<tr>
<td>P082190</td>
<td>0.375&quot; Shank Adapter</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>P081391</td>
<td>23/64&quot; Flush Set</td>
</tr>
<tr>
<td>P081390</td>
<td>31/64&quot; Flush Set</td>
</tr>
<tr>
<td>P081389</td>
<td>39/64&quot; Flush Set</td>
</tr>
<tr>
<td>P081391</td>
<td>23/64&quot; Flush Set, 3-1/2 Long</td>
</tr>
</tbody>
</table>

See pages 94-95 & 97 for additional accessories.
### Rivet Squeezer Accessories

#### .187" Rivet Sets

<table>
<thead>
<tr>
<th>Squeeze Riveter Sets</th>
<th>No.</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM200</td>
<td>1/4&quot;</td>
<td></td>
</tr>
<tr>
<td>SM201</td>
<td>3/8&quot;</td>
<td></td>
</tr>
<tr>
<td>SM202</td>
<td>1/2&quot;</td>
<td></td>
</tr>
<tr>
<td>SM203</td>
<td>5/8&quot;</td>
<td></td>
</tr>
<tr>
<td>SM204</td>
<td>3/4&quot;</td>
<td></td>
</tr>
</tbody>
</table>

For example, to order: 3/8" Long; 1/4" Button<br>Specify: SM201-4358

#### Flush Sets

<table>
<thead>
<tr>
<th>No.</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM210</td>
<td>1/8&quot;</td>
</tr>
<tr>
<td>SM211</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>SM212</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>SM213</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>SM214</td>
<td>5/8&quot;</td>
</tr>
<tr>
<td>SM215</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>SM216</td>
<td>1&quot;</td>
</tr>
</tbody>
</table>

#### Spacer Shims

<table>
<thead>
<tr>
<th>No.</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-S0</td>
<td>1/64&quot; (0.0156&quot;)</td>
</tr>
<tr>
<td>SM-S1</td>
<td>1/32&quot; (0.0312&quot;)</td>
</tr>
<tr>
<td>SM-S2</td>
<td>1/16&quot; (0.0625&quot;)</td>
</tr>
</tbody>
</table>

### .250"/.312"/.375" Rivet Sets

#### Squeeze Riveter Sets

Rivet sets can be furnished in 1/4", 3/8", 1/2", 5/8" and 3/4" lengths and shank sizes. Please specify shank size, length and rivet.

For example, to order: 1/4" Long; 1/8" Universal<br>Specify: SM220-4704

#### .250 Shank

<table>
<thead>
<tr>
<th>No.</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM220</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>SM221</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>SM222</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>SM223</td>
<td>5/8&quot;</td>
</tr>
<tr>
<td>SM224</td>
<td>3/4&quot;</td>
</tr>
</tbody>
</table>

#### .312 Shank

<table>
<thead>
<tr>
<th>No.</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM240</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>SM241</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>SM242</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>SM243</td>
<td>5/8&quot;</td>
</tr>
<tr>
<td>SM244</td>
<td>3/4&quot;</td>
</tr>
</tbody>
</table>

#### .375 Shank

<table>
<thead>
<tr>
<th>No.</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM260</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>SM261</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>SM262</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>SM263</td>
<td>5/8&quot;</td>
</tr>
<tr>
<td>SM264</td>
<td>3/4&quot;</td>
</tr>
</tbody>
</table>

#### Flush Sets

#### .250 Shank

<table>
<thead>
<tr>
<th>No.</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM230</td>
<td>1/8&quot;</td>
</tr>
<tr>
<td>SM231</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>SM232</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>SM233</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>SM234</td>
<td>5/8&quot;</td>
</tr>
<tr>
<td>SM235</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>SM236</td>
<td>7/8&quot;</td>
</tr>
<tr>
<td>SM237</td>
<td>1&quot;</td>
</tr>
</tbody>
</table>

#### .312 Shank

<table>
<thead>
<tr>
<th>No.</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM250</td>
<td>1/8&quot;</td>
</tr>
<tr>
<td>SM251</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>SM252</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>SM253</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>SM254</td>
<td>5/8&quot;</td>
</tr>
<tr>
<td>SM255</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>SM256</td>
<td>7/8&quot;</td>
</tr>
<tr>
<td>SM257</td>
<td>1&quot;</td>
</tr>
</tbody>
</table>

#### .375 Shank

<table>
<thead>
<tr>
<th>No.</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM270</td>
<td>1/8&quot;</td>
</tr>
<tr>
<td>SM271</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>SM272</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>SM273</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>SM274</td>
<td>5/8&quot;</td>
</tr>
<tr>
<td>SM275</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>SM276</td>
<td>7/8&quot;</td>
</tr>
<tr>
<td>SM277</td>
<td>1&quot;</td>
</tr>
</tbody>
</table>

### Tubular Rivet Set

<table>
<thead>
<tr>
<th>No.</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM200</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>SM201</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>SM202</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>SM203</td>
<td>5/8&quot;</td>
</tr>
<tr>
<td>SM204</td>
<td>3/4&quot;</td>
</tr>
</tbody>
</table>

#### Tubular AN-450

<table>
<thead>
<tr>
<th>Rivet Diameter</th>
<th>3/32&quot;</th>
<th>1/8&quot;</th>
<th>5/32&quot;</th>
<th>3/16&quot;</th>
<th>1/4&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM200</td>
<td>4303</td>
<td>4304</td>
<td>4305</td>
<td>4306</td>
<td>4308</td>
</tr>
<tr>
<td>SM201</td>
<td>4423</td>
<td>4424</td>
<td>4425</td>
<td>4426</td>
<td>4428</td>
</tr>
<tr>
<td>SM202</td>
<td>4553</td>
<td>4554</td>
<td>4555</td>
<td>4556</td>
<td>4558</td>
</tr>
<tr>
<td>SM203</td>
<td>4563</td>
<td>4564</td>
<td>4565</td>
<td>4566</td>
<td>4568</td>
</tr>
<tr>
<td>SM204</td>
<td>4703</td>
<td>4704</td>
<td>4705</td>
<td>4706</td>
<td>4708</td>
</tr>
</tbody>
</table>

#### .250 Shank

Some rivet/flush sets may require a six-piece minimum order. Please call for availability.

See pages 94-96 for additional accessories.
**Palm Hammer**

Lightweight, palm-size air hammer replaces a variety of cumbersome hammers. **Equipped with T-15-M plastic tip standard. Other interchangeable tips available in plastic, steel and aluminum.**

- **Height:** 3-5/8"
- **Weight:** 2 lbs.
- **Air Inlet:** 1/4" NPT

**One Shot & Specialty Hammers**

**MP-AH15**

Palm Hammer

**RH2023** Snap Rivet Retainer

**RH8029** Snap Rivet

**RH100Z-28** Snap Rivet Retainer

**RH100Z-29** Snap Rivet Ring

**Pneumatic**

**MP-RPRT20B**

Straight hammer designed to insert roll and spring pins with one blow. Features ball type retainer for easy chisel removal and padded hand grip for operator comfort. **Equipped with blank chisel.**

- **Piston Stroke:** 3-1/4"
- **Bore:** 1"
- **Shank Diameter:** 3/8"
- **Length:** 11-3/8"
- **Weight:** 3.85 lbs.
- **Air Inlet Thread:** 1/4" NPT

**MP-PHT10B**

Pistol one-shot hammer with quick change retainer. Features a bail type hanger and ball type retainer. Special chisels can be manufactured with different length bank grooves to increase the travel distance or throw of the chisel. **Equipped with blank chisel.**

- **Piston Stroke:** 3-1/4"
- **Bore:** 1"
- **Shank Diameter:** 3/8"
- **Length:** 9-3/4"
- **Weight:** 3.30 lbs.
- **Air Inlet Thread:** 1/4" NPT

**One Shot Hammers**

**RH20 & RH80**

One shot hammer for delicate operations requiring lower power, including the insertion of pins, bushings, collarcaps, oil seals, etc. Each lever pull delivers a single blow of precise power. The force of the hit can be regulated by adjusting the air pressure.

**RH9023** Snap Rivet Retainer

**RH8029** Snap Rivet

**RH100Z-28** Snap Rivet Retainer

**RH100Z-29** Snap Rivet Ring

**HPH20**

Blank Chisel

**HPH099** 3/4" Round Face Blank Chisel

**RH90**

Blank Chisel

**RH100Z**

Blank Chisel

**RH1000Z**

Blank Chisel

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet

**RH8029** Snap Rivet
Michigan Pneumatic Model MP-G43H
Pin Riveter
Used for fine riveting applications such as very small rivets, brads, tacks and screws, and light peening and scaling applications. Can also be used for seating press-fit drive studs, drive screws and spring pins. Ideal for straightening shafts and broaches. **Available with 3/8” hex shank sets only.**

PR043H004 Hex Driver

<table>
<thead>
<tr>
<th>Blows Per Minute</th>
<th>Length</th>
<th>Weight</th>
<th>Air Inlet Thread</th>
</tr>
</thead>
<tbody>
<tr>
<td>9000</td>
<td>6”</td>
<td>13 oz.</td>
<td>1/4”</td>
</tr>
</tbody>
</table>

Michigan Pneumatic Model MP-T26
Stone Tool
Carving hammer suitable for marble dressing, facade scaling and ornamental stone. Low air consumption, easy handling and high output makes this tool very practical.

<table>
<thead>
<tr>
<th>Bore</th>
<th>Stroke</th>
<th>Blows Per Minute</th>
<th>Length</th>
<th>Weight</th>
<th>Air Inlet Thread</th>
</tr>
</thead>
<tbody>
<tr>
<td>1”</td>
<td>1-3/16”</td>
<td>3500</td>
<td>7-11/16”</td>
<td>3 lbs.</td>
<td>1/4”</td>
</tr>
</tbody>
</table>

Michigan Pneumatic Model MP-5145-ST
Air Hammer - Heavy Hitting
Features an independent power regulator, “teasing” throttle for operator control, and a one-piece metal motor housing for long life. Ideal for panel cutting and muffler removal. **0.401 shank.**

<table>
<thead>
<tr>
<th>Piston Stroke</th>
<th>Weight</th>
<th>Air Inlet Thread</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-5/8”</td>
<td>3.5 lbs.</td>
<td>1/4”</td>
</tr>
</tbody>
</table>

Michigan Pneumatic Model MP-1020-F
Air Hammer - Heavy Hitting
Designed for heavy-duty mechanical work. Cuts rivets off ball joints, shackle pins, universal joints, king pins, etc. Used for ripping, punching and driving. Features a durable, lightweight nylon handle. **0.401 shank. Made in U.S.A.**

<table>
<thead>
<tr>
<th>Piston Stroke</th>
<th>Weight</th>
<th>Air Inlet Thread</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-3/4”</td>
<td>2.625 lbs.</td>
<td>1/4”</td>
</tr>
</tbody>
</table>

Michigan Pneumatic Model MP-1010-F
Air Hammer - Extra Heavy-Duty
Designed for heavy-duty mechanical work. Cuts rivets off ball joints, shackle pins, universal joints, king pins, etc. A heavy-duty tool for heavy jobs. Features a durable, lightweight nylon handle. **0.401 shank. Made in U.S.A.**

<table>
<thead>
<tr>
<th>Piston Stroke</th>
<th>Weight</th>
<th>Air Inlet Thread</th>
</tr>
</thead>
<tbody>
<tr>
<td>3”</td>
<td>3.25 lbs.</td>
<td>1/4”</td>
</tr>
</tbody>
</table>

See pages 102-103 for air hammer and riveting accessories.
Aircraft Riveters

These rivet hammers are among the most popular for aircraft riveting. Easily controlled, slow, heavy blows deliver just the right impact to form the rivet head without excessively work hardening the rivet or stretching the surrounding metal. Also handy for light chipping, scraping, metal cutting, peening and other hammering applications. All riveters are equipped with quick change and beehive retainer springs and feature removable front bushings.

**Most parts are interchangeable with Chicago Pneumatic 2X, 3X, 4X and CP-4444 series riveters.**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Style</th>
<th>Dural Capacity</th>
<th>Steel Capacity</th>
<th>Bore &amp; Stroke</th>
<th>Blows Per Minute</th>
<th>Shank Diameter</th>
<th>Length w/Retainer</th>
<th>Weight</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-9501X-SK</td>
<td>Offset Grip</td>
<td>5/32&quot;</td>
<td>1/8&quot;</td>
<td>9/16&quot; x 1-3/8&quot;</td>
<td>2850</td>
<td>0.401</td>
<td>5&quot;</td>
<td>2.20 lbs.</td>
<td>1/4&quot;</td>
<td>4 cfm</td>
</tr>
<tr>
<td>MP-2X-ST</td>
<td>Offset Grip</td>
<td>1/8&quot;</td>
<td>3/32&quot;</td>
<td>1/2&quot; x 2-1/4&quot;</td>
<td>2580</td>
<td>0.401</td>
<td>6-11/16&quot;</td>
<td>2.25 lbs.</td>
<td>1/4&quot;</td>
<td>4 cfm</td>
</tr>
<tr>
<td>MP-20X</td>
<td>Offset Grip</td>
<td>1/8&quot;</td>
<td>5/32&quot;</td>
<td>1/2&quot; x 2-7/8&quot;</td>
<td>2160</td>
<td>0.401</td>
<td>7-5/16&quot;</td>
<td>2.30 lbs.</td>
<td>1/4&quot;</td>
<td>4 cfm</td>
</tr>
<tr>
<td>MP-20XBU</td>
<td>Pushbutton</td>
<td>1/8&quot;</td>
<td>5/32&quot;</td>
<td>1/2&quot; x 2-7/8&quot;</td>
<td>2160</td>
<td>0.401</td>
<td>7-5/16&quot;</td>
<td>2.30 lbs.</td>
<td>1/4&quot;</td>
<td>4 cfm</td>
</tr>
<tr>
<td>MP-20XG</td>
<td>Pistol Grip</td>
<td>1/8&quot;</td>
<td>5/32&quot;</td>
<td>1/2&quot; x 2-7/8&quot;</td>
<td>2160</td>
<td>0.401</td>
<td>7-5/16&quot;</td>
<td>2.30 lbs.</td>
<td>1/4&quot;</td>
<td>4 cfm</td>
</tr>
<tr>
<td>MP-3X-ST</td>
<td>Offset Grip</td>
<td>3/16&quot;</td>
<td>5/32&quot;</td>
<td>1/2&quot; x 2-7/8&quot;</td>
<td>2160</td>
<td>0.401</td>
<td>8-5/16&quot;</td>
<td>2.50 lbs.</td>
<td>1/4&quot;</td>
<td>4 cfm</td>
</tr>
<tr>
<td>MP-30X</td>
<td>Offset Grip</td>
<td>3/16&quot;</td>
<td>5/32&quot;</td>
<td>1/2&quot; x 2-7/8&quot;</td>
<td>2160</td>
<td>0.401</td>
<td>10-13/16&quot;</td>
<td>4.00 lbs.</td>
<td>1/4&quot;</td>
<td>4 cfm</td>
</tr>
<tr>
<td>MP-30XBU</td>
<td>Pushbutton</td>
<td>3/16&quot;</td>
<td>5/32&quot;</td>
<td>1/2&quot; x 2-7/8&quot;</td>
<td>2160</td>
<td>0.401</td>
<td>10-13/16&quot;</td>
<td>4.00 lbs.</td>
<td>1/4&quot;</td>
<td>4 cfm</td>
</tr>
<tr>
<td>MP-30XG</td>
<td>Pistol Grip</td>
<td>3/16&quot;</td>
<td>5/32&quot;</td>
<td>1/2&quot; x 2-7/8&quot;</td>
<td>2160</td>
<td>0.401</td>
<td>10-13/16&quot;</td>
<td>4.00 lbs.</td>
<td>1/4&quot;</td>
<td>4 cfm</td>
</tr>
<tr>
<td>MP-4X-ST</td>
<td>Offset Grip</td>
<td>1/4&quot;</td>
<td>3/16&quot;</td>
<td>1/2&quot; x 3-1/16&quot;</td>
<td>1740</td>
<td>0.401</td>
<td>8-5/16&quot;</td>
<td>2.75 lbs.</td>
<td>1/4&quot;</td>
<td>4 cfm</td>
</tr>
<tr>
<td>MP-40X</td>
<td>Offset Grip</td>
<td>1/4&quot;</td>
<td>3/16&quot;</td>
<td>1/2&quot; x 3-1/16&quot;</td>
<td>1740</td>
<td>0.401</td>
<td>9-5/16&quot;</td>
<td>2.75 lbs.</td>
<td>1/4&quot;</td>
<td>4 cfm</td>
</tr>
<tr>
<td>MP-40XBU</td>
<td>Pushbutton</td>
<td>1/4&quot;</td>
<td>3/16&quot;</td>
<td>1/2&quot; x 3-1/16&quot;</td>
<td>1740</td>
<td>0.401</td>
<td>10-13/16&quot;</td>
<td>2.50 lbs.</td>
<td>1/4&quot;</td>
<td>4 cfm</td>
</tr>
<tr>
<td>MP-40XG</td>
<td>Pistol Grip</td>
<td>1/4&quot;</td>
<td>3/16&quot;</td>
<td>1/2&quot; x 3-1/16&quot;</td>
<td>1740</td>
<td>0.401</td>
<td>10-13/16&quot;</td>
<td>2.50 lbs.</td>
<td>1/4&quot;</td>
<td>4 cfm</td>
</tr>
<tr>
<td>NBH-400</td>
<td>Offset Grip</td>
<td>1/4&quot;</td>
<td>3/16&quot;</td>
<td>1/2&quot; x 3-3/4&quot;</td>
<td>1600</td>
<td>0.401</td>
<td>8-3/4&quot;</td>
<td>3.10 lbs.</td>
<td>1/4&quot;</td>
<td>4 cfm</td>
</tr>
</tbody>
</table>

**Optional Handles**

- Offset Grip
- Pushbutton
- Pistol Grip (Gooseneck)

See pages 102-103 for aircraft riveter accessories.
These rivet hammers are among the most popular for aircraft riveting. Easily controlled, slow, heavy blows deliver just the right impact to form the rivet head without excessively work hardening the rivet or stretching the surrounding metal. Also handy for light chipping, scraping, metal cutting, peening and other hammering applications. All riveters are equipped with quick change and beehive retainer springs and feature removable front bushings. Most parts are interchangeable with Chicago Pneumatic 5X, 7X, 9X and CP-4447 series riveters. A 0.401 shank bushing, part no. HG-50215.401, also available for all 0.498 shank tools below.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Style</th>
<th>Dural Capacity</th>
<th>Steel Capacity</th>
<th>Bore &amp; Stroke</th>
<th>Blows Per Minute</th>
<th>Shank Diameter</th>
<th>Length w/ Retainer</th>
<th>Weight</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-5X-ST</td>
<td>Offset Grip</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>3/4&quot; x 2-11/16&quot;</td>
<td>1560</td>
<td>0.498</td>
<td>8-15/16&quot;</td>
<td>4.75 lbs.</td>
<td>1/4&quot;</td>
<td>6 cfm</td>
</tr>
<tr>
<td>MP-50X</td>
<td>Offset Grip</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>3/4&quot; x 2-11/16&quot;</td>
<td>1560</td>
<td>0.498</td>
<td>8-15/16&quot;</td>
<td>7.00 lbs.</td>
<td>1/4&quot;</td>
<td>6 cfm</td>
</tr>
<tr>
<td>MP-50XG</td>
<td>Offset Grip</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>3/4&quot; x 2-11/16&quot;</td>
<td>1560</td>
<td>0.498</td>
<td>8-15/16&quot;</td>
<td>4.75 lbs.</td>
<td>1/4&quot;</td>
<td>6 cfm</td>
</tr>
<tr>
<td>MP-70X</td>
<td>Offset Grip</td>
<td>3/8&quot;</td>
<td>5/16&quot;</td>
<td>3/4&quot; x 5-13/16&quot;</td>
<td>900</td>
<td>0.498</td>
<td>11-15/16&quot;</td>
<td>6.00 lbs.</td>
<td>1/4&quot;</td>
<td>6 cfm</td>
</tr>
<tr>
<td>MP-70XG</td>
<td>Offset Grip</td>
<td>3/8&quot;</td>
<td>5/16&quot;</td>
<td>3/4&quot; x 5-13/16&quot;</td>
<td>900</td>
<td>0.498</td>
<td>11-15/16&quot;</td>
<td>8.25 lbs.</td>
<td>1/4&quot;</td>
<td>6 cfm</td>
</tr>
<tr>
<td>NBH-600A</td>
<td>Offset Grip</td>
<td>5/16&quot;</td>
<td>1/4&quot;</td>
<td>3/4&quot; x 2-11/16&quot;</td>
<td>1500</td>
<td>0.498</td>
<td>9-5/8&quot;</td>
<td>4.40 lbs.</td>
<td>1/4&quot;</td>
<td>6 cfm</td>
</tr>
<tr>
<td>MP-90X</td>
<td>Offset Grip</td>
<td>5/16&quot;</td>
<td>1/4&quot;</td>
<td>3/4&quot; x 3-7/8&quot;</td>
<td>1140</td>
<td>0.498</td>
<td>10&quot;</td>
<td>5.45 lbs.</td>
<td>1/4&quot;</td>
<td>6 cfm</td>
</tr>
<tr>
<td>MP-90XG</td>
<td>Offset Grip</td>
<td>5/16&quot;</td>
<td>1/4&quot;</td>
<td>3/4&quot; x 3-7/8&quot;</td>
<td>1140</td>
<td>0.498</td>
<td>10&quot;</td>
<td>6.95 lbs.</td>
<td>1/4&quot;</td>
<td>6 cfm</td>
</tr>
</tbody>
</table>

**Needle Scaler Attachment**
For standard 0.498" shank riveters. 3mmx12 Replacement Needles

**Nail Driving Attachments**
Ideal for dry dock construction, retaining wall construction, decks, fences and beam construction. Designed to increase production while reducing operator fatigue.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Shank Diameter</th>
<th>Max. Nail Head Diameter</th>
<th>Retainer Type</th>
<th>Length</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>P042448</td>
<td>0.498</td>
<td>9/16&quot;</td>
<td>Double Spring</td>
<td>2-3/8&quot;</td>
<td>1.13 lbs.</td>
</tr>
<tr>
<td>SD60-149A</td>
<td>0.498</td>
<td>3/4&quot;</td>
<td>Solid Steel w/Nylon Insert</td>
<td>2-3/8&quot;</td>
<td>1.00 lbs.</td>
</tr>
<tr>
<td>P047810</td>
<td>0.498</td>
<td>7/8&quot;</td>
<td>Double Spring</td>
<td>2-3/4&quot;</td>
<td>1.25 lbs.</td>
</tr>
</tbody>
</table>
Michigan Pneumatic

Heavy-Duty Industrial Quality Chisels
For .401 & .498 Shank Riveting Hammers

For all air hammers, light riveting hammers, panel cutters and zip guns with .401 and .498 Parker taper shanks. Made of high grade alloy steel and heat treated for extremely durable service.

<table>
<thead>
<tr>
<th>Description</th>
<th>Specify Shank Size</th>
<th>.401</th>
<th>.498</th>
</tr>
</thead>
<tbody>
<tr>
<td>7&quot; Chisel Blank</td>
<td></td>
<td>913</td>
<td>963</td>
</tr>
<tr>
<td>7&quot; Flat Chisel</td>
<td></td>
<td>910</td>
<td>960</td>
</tr>
<tr>
<td>11&quot; Flat Chisel</td>
<td></td>
<td>910-11FC</td>
<td>960-12</td>
</tr>
<tr>
<td>Moil Point</td>
<td></td>
<td>940</td>
<td>2P21</td>
</tr>
<tr>
<td>1-1/2&quot; Wide Chisel</td>
<td></td>
<td>910-1.50</td>
<td>960-1.50</td>
</tr>
<tr>
<td>Muffler Cutter</td>
<td></td>
<td>908</td>
<td>-</td>
</tr>
<tr>
<td>Arvin Muffler Cutter</td>
<td></td>
<td>501</td>
<td>-</td>
</tr>
<tr>
<td>Single Bladed Panel Cutter</td>
<td></td>
<td>923PC</td>
<td>-</td>
</tr>
<tr>
<td>Double Bladed Panel Cutter</td>
<td></td>
<td>909</td>
<td>959</td>
</tr>
<tr>
<td>Spot Weld Breaker</td>
<td></td>
<td>914</td>
<td>-</td>
</tr>
<tr>
<td>Tail Pipe Cutter</td>
<td></td>
<td>902TP</td>
<td>-</td>
</tr>
<tr>
<td>Scrapper</td>
<td></td>
<td>905</td>
<td>955</td>
</tr>
<tr>
<td>Body Ripper</td>
<td></td>
<td>907</td>
<td>-</td>
</tr>
<tr>
<td>Tapered Punch</td>
<td></td>
<td>911</td>
<td>961</td>
</tr>
<tr>
<td>Spoon Chisel</td>
<td></td>
<td>922</td>
<td>-</td>
</tr>
<tr>
<td>Tie Rod Tool</td>
<td></td>
<td>901TR</td>
<td>965TR</td>
</tr>
<tr>
<td>Bushing Remover</td>
<td></td>
<td>904</td>
<td>-</td>
</tr>
<tr>
<td>Bushing Cutter &amp; Splitter</td>
<td></td>
<td>906</td>
<td>964</td>
</tr>
<tr>
<td>Shock Absorber</td>
<td></td>
<td>436</td>
<td>-</td>
</tr>
<tr>
<td>Body Forming Tool</td>
<td></td>
<td>2N181</td>
<td>-</td>
</tr>
<tr>
<td>Rivet &amp; Bolt Cutter</td>
<td></td>
<td>912</td>
<td>962</td>
</tr>
<tr>
<td>Fork Chisel</td>
<td></td>
<td>903-1</td>
<td>968FC</td>
</tr>
</tbody>
</table>

*Please specify size required.

Non-Sparking .401" Shank Chisels
Beryllium copper safety chisels used for scraping and cutting applications where flammable vapors or residues are present.

Model 910-2-BC
Wide Chisel

Model 909-BC
Panel Cutter

Michigan Pneumatic

Retainer Springs

<table>
<thead>
<tr>
<th>Beehive</th>
<th>Quick Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fits Most .401 Shank</td>
<td>Fits CP9311, CP9314, CP711, CP714, CP715</td>
</tr>
<tr>
<td>Fits Most .498 Shank</td>
<td>Fits AVC26, AVC10-13, Fits Cleco G4, G6, G8</td>
</tr>
</tbody>
</table>

Beehive: 895, 898
Quick Change: 897, 896, A046094, 897-TW

See pages 101 & 103 for additional air hammer and riveting accessories.
.401" Shank Rivet Sets

For example, to order: 3-1/2" Long; 3/16" Flat
Specify: SM10-4426

<table>
<thead>
<tr>
<th>Part No.</th>
<th>&quot;L&quot;</th>
<th>3-1/2&quot;</th>
<th>5-1/2&quot;</th>
<th>7-1/2&quot;</th>
<th>10-1/2&quot;</th>
<th>13-1/2&quot;</th>
<th>3-1/2&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM10</td>
<td>3-1/2&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SM11</td>
<td>5-1/2&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SM12</td>
<td>7-1/2&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SM13</td>
<td>10-1/2&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SM14</td>
<td>13-1/2&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SM50</td>
<td>3-1/2&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Riveter & Air Hammer Accessories

Needle Scaler Attachment
For most standard 0.401" shank air hammers, 3mmx19 Replacement Needles

Model SA0204RNS

.498" Shank Rivet Sets

For example, to order: 3-1/2" Long; 5/32" Universal
Specify: SM30-4705

<table>
<thead>
<tr>
<th>Part No.</th>
<th>&quot;L&quot;</th>
<th>3-1/2&quot;</th>
<th>5-1/2&quot;</th>
<th>7-1/2&quot;</th>
<th>10-1/2&quot;</th>
<th>13-1/2&quot;</th>
<th>3-1/2&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM30</td>
<td>3-1/2&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SM31</td>
<td>5-1/2&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SM32</td>
<td>7-1/2&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SM70</td>
<td>3-1/2&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Flush Sets

<table>
<thead>
<tr>
<th>0.401&quot; Shank</th>
<th>0.498&quot; Shank</th>
<th>Diameter</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM90</td>
<td>-</td>
<td>1&quot;</td>
<td>2-1/2&quot;</td>
</tr>
<tr>
<td>SM91</td>
<td>SM101</td>
<td>1&quot;</td>
<td>3&quot;</td>
</tr>
<tr>
<td>SM92</td>
<td>SM102</td>
<td>1&quot;</td>
<td>5-1/2&quot;</td>
</tr>
<tr>
<td>SM93</td>
<td>-</td>
<td>1&quot;</td>
<td>7-1/2&quot;</td>
</tr>
<tr>
<td>SM94</td>
<td>SM104</td>
<td>1-1/4&quot;</td>
<td>3&quot;</td>
</tr>
<tr>
<td>SM95</td>
<td>-</td>
<td>1-1/4&quot;</td>
<td>5-1/2&quot;</td>
</tr>
<tr>
<td>SM96</td>
<td>SM106</td>
<td>1-1/2&quot;</td>
<td>3-1/8&quot;</td>
</tr>
<tr>
<td>SM97</td>
<td>SM107</td>
<td>1-3/4&quot;</td>
<td>3-1/4&quot;</td>
</tr>
<tr>
<td>SM98</td>
<td>SM108</td>
<td>1-1/8&quot;</td>
<td>2-1/4&quot;</td>
</tr>
<tr>
<td>SM99</td>
<td>-</td>
<td>1-1/4&quot;</td>
<td>2-1/4&quot;</td>
</tr>
</tbody>
</table>

Safety Chuck Chisel Holder
New safety feature fits all .401 pneumatic hammers. Tighten chisel holder to lock the chisel firmly in place. Loosen the chisel holder to allow quick change of chisels.

Model MM1951

Some rivet/flush sets may require a six-piece minimum order. Please call for availability.

.498" to .401" Shank Adapter
For use with 0.498" riveters. This tool makes rivet set inventories interchangeable.

Quick Change Safety Retainer
- Safe, fast and easy
- Industry's most popular chisel retainer

The retainer becomes a part of the tool and eliminates the expense and trouble of beehive and quick change springs. Accepts non-turn and turn type tools. Please specify make and model number of hammer when ordering.

0.401 Shank:
- 0111 Automotive quality
- 3300 Industrial quality

0.498 Shank:
- 3200 Industrial quality

<table>
<thead>
<tr>
<th>Model</th>
<th>Shank</th>
<th>Fits Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>0111</td>
<td>0.401</td>
<td>Fits most Michigan Pneumatic models except MP-1010-F &amp; MP-1020-F</td>
</tr>
<tr>
<td>3300-1</td>
<td>0.401</td>
<td>All American Pneumatic, Desoutre &amp; Superior, Ingersoll-Rand 121, 132, 772, AV10-12-13, Sioux 270-272</td>
</tr>
<tr>
<td>3300-9</td>
<td>0.401</td>
<td>Chicago Pneumatic 9311-9315, 711-715, 2X-4X, 4444, Cleco E3-E4-E5-E16, Craftsman 18800, All Dayton, Ingersoll-Rand 115, 116, 117, 270-272</td>
</tr>
<tr>
<td>3300-10</td>
<td>0.401</td>
<td>All Florida Pneumatic, Snap-On PH45-PH50</td>
</tr>
<tr>
<td>3300-U</td>
<td>0.401</td>
<td>Chicago Pneumatic 9311-9315, 711-715, Cleco E3-E4-E5-E16, Craftsman 18800, All Dayton, Ingersoll-Rand 115, 116, 117, Snap-On PH45-PH50, All Florida Pneumatic</td>
</tr>
<tr>
<td>3200-1</td>
<td>0.498</td>
<td>Ingersoll-Rand AVC-26</td>
</tr>
<tr>
<td>3200-3</td>
<td>0.498</td>
<td>Chicago Pneumatic 4447-717, 5X-9X</td>
</tr>
</tbody>
</table>

Model 3300-10

See pages 101-102 for additional air hammer and riveting accessories.
Planishing Hammer Accessories

Planishing Hammer Dies

Form and shape light gauge sheet metal into replacement fenders and body parts using the same industrial grade tools the professionals use. Our planishing hammer parts and accessories are designed to retrofit to an original planishing hammer, or can be used to build a new unit. The original style hammer mechanism delivers 3000 blows per minute to planish light gauge sheet metal shapes for automobile restoration and race car fabrication. Replacement dies manufactured from S-5 tool steel.

Polished Dies - Upper

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>528-D3</td>
<td>Type 1 Short Cylinder Complete</td>
</tr>
<tr>
<td>528-D6</td>
<td>Type 1 Short Cylinder Coupling Sleeve</td>
</tr>
<tr>
<td>528-D7</td>
<td>Type 1 Short Cylinder Lock Spring</td>
</tr>
<tr>
<td>528-D15</td>
<td>Type 1 Short Cylinder Lock Pin (not shown)</td>
</tr>
<tr>
<td>528-D20</td>
<td>Type 1 Short Piston, Type 1</td>
</tr>
<tr>
<td>528-D30</td>
<td>Type 1 Short O-Ring</td>
</tr>
</tbody>
</table>

Polished Dies - Lower

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>528-D1</td>
<td>Type 2 Long Cylinder Complete</td>
</tr>
<tr>
<td>528-D2</td>
<td>Type 2 Long Cylinder Coupling Sleeve</td>
</tr>
<tr>
<td>528-D4</td>
<td>Type 2 Long Cylinder Lock Spring</td>
</tr>
<tr>
<td>528-D9</td>
<td>Type 2 Long Cylinder Lock Pin (not shown)</td>
</tr>
<tr>
<td>528-D10</td>
<td>Type 2 Long Piston, Type 2</td>
</tr>
<tr>
<td>528-D12</td>
<td>Type 2 Long O-Ring</td>
</tr>
<tr>
<td>528-D19</td>
<td>Type 2 Long O-Ring (requires 3 pieces)</td>
</tr>
<tr>
<td>528-D25</td>
<td>Type 2 Long Exhaust Deflector (not included in assembly)</td>
</tr>
<tr>
<td>528-D26</td>
<td>Type 2 Long Exhaust Deflector (not included in assembly)</td>
</tr>
<tr>
<td>528-D27</td>
<td>Type 2 Long Hammer Case</td>
</tr>
<tr>
<td>528-D6R</td>
<td>Type 2 Long Backhead with Wide Groove</td>
</tr>
<tr>
<td>528-D8</td>
<td>Type 2 Long Cylinder Coupling Sleeve</td>
</tr>
<tr>
<td>528-D12R</td>
<td>Type 2 Long Cylinder Lock Spring</td>
</tr>
<tr>
<td>528-D17</td>
<td>Type 2 Long Cylinder Lock Pin (not shown)</td>
</tr>
<tr>
<td>528-D23</td>
<td>Type 2 Long Piston, Type 2</td>
</tr>
<tr>
<td>528-D24R</td>
<td>Type 2 Long O-Ring</td>
</tr>
<tr>
<td>528-D28</td>
<td>Type 2 Long O-Ring (requires 3 pieces)</td>
</tr>
<tr>
<td>528-D29</td>
<td>Type 2 Long Exhaust Deflector (not included in assembly)</td>
</tr>
<tr>
<td>528-D36R</td>
<td>Type 2 Long Exhaust Deflector (not included in assembly)</td>
</tr>
</tbody>
</table>

Planishing Hammer Parts

By popular demand, planishing hammer parts to retrofit to an original unit or to build a new hammer. Use the original style hammer mechanism that delivers 3000 blows per minute.

Complete Assemblies

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>P072340CP</td>
<td>Type 1 Short Cylinder Complete</td>
<td>CP-528, CP-522 &amp; CP-529</td>
</tr>
<tr>
<td>P074365CP</td>
<td>Type 2 Long Cylinder Complete</td>
<td>CP-524-24 &amp; CP-524-36</td>
</tr>
</tbody>
</table>

Type 1 Short Planishing Hammer Parts

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>P072340</td>
<td>Short Cylinder, Type 1</td>
</tr>
<tr>
<td>P072341</td>
<td>Backhead with Narrow Groove</td>
</tr>
<tr>
<td>P072342</td>
<td>Cylinder Coupling Sleeve</td>
</tr>
<tr>
<td>P072343</td>
<td>Cylinder Lock Spring</td>
</tr>
<tr>
<td>P072344</td>
<td>Cylinder Lock Pin (not shown)</td>
</tr>
<tr>
<td>P070805</td>
<td>Piston, Type 1</td>
</tr>
<tr>
<td>568-022BN70</td>
<td>O-Ring</td>
</tr>
<tr>
<td>568-028BN70</td>
<td>O-Ring (requires 3 pieces)</td>
</tr>
<tr>
<td>568-028BN70</td>
<td>Return Spring (not included in assembly)</td>
</tr>
<tr>
<td>528-D20</td>
<td>Exhaust Deflector (not included in assembly)</td>
</tr>
</tbody>
</table>

Type 2 Long Planishing Hammer Parts

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>P070528EH</td>
<td>Exhaust Deflector (not included in assembly)</td>
</tr>
<tr>
<td>P074368</td>
<td>Long Cylinder, Type 2</td>
</tr>
<tr>
<td>P074367</td>
<td>Backhead with Wide Groove</td>
</tr>
<tr>
<td>P072342</td>
<td>Cylinder Coupling Sleeve</td>
</tr>
<tr>
<td>P072343</td>
<td>Cylinder Lock Spring</td>
</tr>
<tr>
<td>P072344</td>
<td>Cylinder Lock Pin (not shown)</td>
</tr>
<tr>
<td>P074366</td>
<td>Piston, Type 2</td>
</tr>
<tr>
<td>568-022BN70</td>
<td>O-Ring</td>
</tr>
<tr>
<td>568-028BN70</td>
<td>O-Ring (requires 3 pieces)</td>
</tr>
<tr>
<td>568-028BN70</td>
<td>Return Spring (not included in assembly)</td>
</tr>
<tr>
<td>P070528EH</td>
<td>Exhaust Deflector (not included in assembly)</td>
</tr>
<tr>
<td>P074363</td>
<td>Hammer Case (not included in assembly)</td>
</tr>
</tbody>
</table>
### Riveting Hammers, Busters & Accessories

#### Riveting Hammer

**Michigan Pneumatic Model MP-60R Riveting Hammer**

Medium-duty hammer recommended for riveting work on tanks, steel cars and light structural steel. Powerful, smooth running and easy to hold. **Can be converted to a rivet buster with retainer for using chisels. Parts interchangeable with CP-60, 4689 series riveters.**

<table>
<thead>
<tr>
<th>Capacity</th>
<th>7/8&quot; Hot Rivets</th>
<th>Length</th>
<th>17-9/16&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bore</td>
<td>1-1/16&quot;</td>
<td>Weight</td>
<td>20.5 lbs</td>
</tr>
<tr>
<td>Piston Stroke</td>
<td>7-5/16&quot;</td>
<td>Shank Diameter</td>
<td>1.217&quot;</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>1320</td>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
</tbody>
</table>

#### Rivet Buster

**Michigan Pneumatic Model MP-80RB Rivet Buster**

Powerful rivet buster can be used for cutting large rivets and bolts. Great for heavy-duty chipping in construction applications. Equipped with retainer parts and spring. **Can be converted to a riveter for using rivet sets by removing the retainer accessories and adding a P001381 retainer clip. Parts interchangeable with CP-80, 4689 series riveters.**

<table>
<thead>
<tr>
<th>Capacity</th>
<th>1-1/8&quot; Hot Rivets</th>
<th>Length</th>
<th>22&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bore</td>
<td>1-1/16&quot;</td>
<td>Weight</td>
<td>24 lbs</td>
</tr>
<tr>
<td>Piston Stroke</td>
<td>9-1/2&quot;</td>
<td>Shank Diameter</td>
<td>1.217&quot;</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>1200</td>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic Model MP-90RBHDCC Rivet Buster**

Heavy-duty riveter will drive hot rivets up to 1-1/4" diameter. Sizes designed for light and medium riveting work also available. Suited for general construction work and pipe lines. **Can be converted to a riveter for using rivet sets by removing the retainer accessories and adding a P001381 retainer clip. Parts interchangeable with CP-90, 4689 series riveters.**

<table>
<thead>
<tr>
<th>Capacity</th>
<th>1-1/4&quot; Hot Rivets</th>
<th>Length</th>
<th>20-9/16&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bore</td>
<td>1-1/16&quot;</td>
<td>Weight</td>
<td>23 lbs</td>
</tr>
<tr>
<td>Piston Stroke</td>
<td>10&quot;</td>
<td>Shank Diameter</td>
<td>1.217&quot;</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>1020</td>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
</tbody>
</table>

### Riveting Hammer Accessories

**Fits 1.217 Shank Hammers**

- **DEL12172ND** Nail Driver
- **DEL121734ND** Nail Driver
- **160-2.445** Retainer (uses 1194-2 & 194 Lock Springs)
- **P001381** Retainer Clip

**Buttonhead Rivet Sets**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Face Dia. (A)</th>
<th>Cup Dia. (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEL1502</td>
<td>7/16&quot;</td>
<td>11/16&quot;</td>
</tr>
<tr>
<td>DEL1503</td>
<td>1/2&quot;</td>
<td>25/32&quot;</td>
</tr>
<tr>
<td>DEL1505</td>
<td>5/8&quot;</td>
<td>1&quot;</td>
</tr>
<tr>
<td>DEL1506</td>
<td>11/16&quot;</td>
<td>1-3/32&quot;</td>
</tr>
<tr>
<td>DEL1507</td>
<td>3/4&quot;</td>
<td>1-3/16&quot;</td>
</tr>
<tr>
<td>DEL1508</td>
<td>13/16&quot;</td>
<td>1-9/32&quot;</td>
</tr>
<tr>
<td>DEL1509</td>
<td>7/8&quot;</td>
<td>1-3/8&quot;</td>
</tr>
<tr>
<td>DEL1510</td>
<td>15/16&quot;</td>
<td>1-15/32&quot;</td>
</tr>
<tr>
<td>DEL1511</td>
<td>1&quot;</td>
<td>1-19/32&quot;</td>
</tr>
<tr>
<td>DEL1513</td>
<td>1-1/8&quot;</td>
<td>1-3/4&quot;</td>
</tr>
<tr>
<td>DEL1515</td>
<td>1-1/4&quot;</td>
<td>2&quot;</td>
</tr>
</tbody>
</table>

See page 108 for rivet buster accessories.
Rivet Busters

Rivet Buster

Michigan Pneumatic Model MP-4181-USA-NEP

Ideal for cutting large rivets, concrete demolition, and heavy-duty chipping work in maintenance and construction. Features a Boyer spool valve to deliver smooth power in any operating position. Equipped to accept 2000 series jumbo chisels. Optional T-handle #0448051-C available. Model MP-4181T-USA-NEP with trenching handle available.

Capacity..........................1" Rivets
Bore...............................1-3/16"
Piston Stroke..................11"
Blows Per Minute................720
Length.................................26"
Weight................................34.5 lbs.
Shank Diameter.....................1.5"
Air Inlet Thread.................3/8"n

2101 Upper Sleeve
2103 Lower Sleeve
2104 Rubber Bumper
2194 Lock Spring
2190-2.557 Retainer

Rivet Buster

Michigan Pneumatic Model MP-4181RB-8

Ideal for cutting large rivets, concrete demolition, heavy-duty chipping work in maintenance and construction. Great for overhead bridge and parking deck concrete repair and demolition work. Features Boyer spool valve to deliver smooth power in any operating position. Equipped to accept 2000 series jumbo chisels. Optional T-handle #0448051-C available. Model MP-4181T-8 with trenching handle available.

Capacity..........................7/8" Rivets
Bore...............................1-3/16"
Piston Stroke..................8"
Blows Per Minute................1080
Length.................................23"
Weight.................................31.25 lbs.
Shank Diameter.....................1.5"
Air Inlet Thread...............3/8"

2101 Upper Sleeve
2103 Lower Sleeve
2104 Rubber Bumper
2194 Lock Spring
2190-2.557 Retainer

Rivet Buster

Michigan Pneumatic Model MP-4181RB

Ideal for cutting large rivets, concrete demolition, and heavy-duty chipping work in maintenance and construction. Features a Boyer spool valve to deliver smooth power in any operating position. Equipped to accept 2000 series jumbo chisels. Optional T-handle #0448051-C available. Model MP-4181T with trenching handle available.

Capacity..........................1" Rivets
Bore...............................1-3/16"
Piston Stroke..................11"
Blows Per Minute................720
Length.................................26"
Weight.................................34.5 lbs.
Shank Diameter.....................1.5"
Air Inlet Thread...............3/8"

2101 Upper Sleeve
2103 Lower Sleeve
2104 Rubber Bumper
2194 Lock Spring
2190-2.557 Retainer

Rivet Buster

Michigan Pneumatic Model MP-RB90-J

Powerful, hard hitting hammer is ideal for cutting bolts and rivet heads. Great for heavy-duty chipping and nail driving. Simple removal of retainer and parts converts tool to a riveter for using rivet sets. Jumbo Model MP-RB91-J with 1.5" shank comes equipped with 2101, 2103, 2104, 2194 & 2190-2.400 accessories to accept 2000 series jumbo chisels.

Capacity..........................1-1/4" Hot Rivets
Bore...............................1-1/16"
Piston Stroke..................9"
Blows Per Minute................950
Length.................................20-1/4"
Weight.................................23 lbs.
Shank Diameter.....................1.217"
Air Inlet Thread...............3/8"

MP-RB90-J (only):
1502 Upper Sleeve
1504 Lower Sleeve
1505 Rubber Bumper
194 Lock Spring
190-2.400 Retainer

See page 108 for rivet buster accessories.
Rivet Busters

Michigan Pneumatic Model MP-633
Model MP-633-NEP

Rivet Buster
Ideal for construction, ship building and heavy machinery. Designed to deliver slow, heavy blows. **Equipped to accept 2000 series jumbo chisels.** Model MP-633-NEP features a non-ejectable piston.

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Spec</th>
</tr>
</thead>
<tbody>
<tr>
<td>2101</td>
<td>Upper Sleeve</td>
<td></td>
</tr>
<tr>
<td>2103</td>
<td>Lower Sleeve</td>
<td></td>
</tr>
<tr>
<td>2104</td>
<td>Rubber Bumper</td>
<td></td>
</tr>
<tr>
<td>2194</td>
<td>Lock Spring</td>
<td></td>
</tr>
<tr>
<td>2190-2.557</td>
<td>Retainer</td>
<td></td>
</tr>
</tbody>
</table>

| Capacity | 3/4" | Length | 20-1/2" |
| Bore     | 1-3/16" | Weight | 27.5 lbs. |
| Piston Stroke | 6" | Shank Diameter | 1.5" |
| Blows Per Minute | 1100 | Air Inlet Thread | 3/8" |

Michigan Pneumatic Model MP-133
Model MP-133-NEP

Rivet Buster
Heavy-duty hammer recommended for steel cars and light structural work. Ideal for bridge deck repair and rivet work on underground tanks. **Equipped to accept 2000 series jumbo chisels.** Model MP-133-NEP features a non-ejectable piston.

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Spec</th>
</tr>
</thead>
<tbody>
<tr>
<td>2101</td>
<td>Upper Sleeve</td>
<td></td>
</tr>
<tr>
<td>2103</td>
<td>Lower Sleeve</td>
<td></td>
</tr>
<tr>
<td>2104</td>
<td>Rubber Bumper</td>
<td></td>
</tr>
<tr>
<td>2194</td>
<td>Lock Spring</td>
<td></td>
</tr>
<tr>
<td>1851</td>
<td>Retainer</td>
<td></td>
</tr>
</tbody>
</table>

| Capacity | 7/8" | Length | 22" |
| Bore     | 1-3/16" | Weight | 30 lbs. |
| Piston Stroke | 8" | Shank Diameter | 1.5" |
| Blows Per Minute | 960 | Air Inlet Thread | 3/8" |

Michigan Pneumatic Model MP-1133
Model MP-1133-NEP

Rivet Buster
Powerful long stroke hammer has the ability to perform all extra heavy-duty demolition applications. Ideal for cutting large rivets, bolts and underground tanks. **Equipped to accept 2000 series jumbo chisels.** Model MP-1133-NEP features a non-ejectable piston.

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Spec</th>
</tr>
</thead>
<tbody>
<tr>
<td>2101</td>
<td>Upper Sleeve</td>
<td></td>
</tr>
<tr>
<td>2103</td>
<td>Lower Sleeve</td>
<td></td>
</tr>
<tr>
<td>2104</td>
<td>Rubber Bumper</td>
<td></td>
</tr>
<tr>
<td>2194</td>
<td>Lock Spring</td>
<td></td>
</tr>
<tr>
<td>1851</td>
<td>Retainer</td>
<td></td>
</tr>
</tbody>
</table>

| Capacity | 1" | Length | 25" |
| Bore     | 1-3/16" | Weight | 34 lbs. |
| Piston Stroke | 11" | Shank Diameter | 1.5" |
| Blows Per Minute | 850 | Air Inlet Thread | 3/8" |

Michigan Pneumatic Model MP-RB900I-J
Model MP-RB910I-J

Rivet Buster
Powerful hammer for concrete demolition, cutting bolts and rivet heads. Additional applications include heavy-duty chipping and nail driving. Features a D-handle with inside trigger and built-in oil reservoir. **Jumbo Model** MP-RB910I-J with 1.5" shank comes equipped with 2101, 2103, 2104, 2194 & 2190-2.400 accessories to accept 2000 series jumbo chisels.

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Spec</th>
</tr>
</thead>
<tbody>
<tr>
<td>1502</td>
<td>Upper Sleeve</td>
<td></td>
</tr>
<tr>
<td>1504</td>
<td>Lower Sleeve</td>
<td></td>
</tr>
<tr>
<td>1505</td>
<td>Rubber Bumper</td>
<td></td>
</tr>
<tr>
<td>194</td>
<td>Lock Spring</td>
<td></td>
</tr>
<tr>
<td>190-2.400</td>
<td>Retainer</td>
<td></td>
</tr>
</tbody>
</table>

| Capacity | 1-1/4" | Length | 20-1/2" |
| Bore     | 1-1/16" | Weight | 24 lbs. |
| Piston Stroke | 9" | Shank Diameter | 1.217" |
| Blows Per Minute | 900 | Air Inlet Thread | 3/8" |

See page 108 for rivet buster accessories.
Rivet Buster Accessories

Rivet Buster Chisels 1500 series and 2000 series chisels and accessories

<table>
<thead>
<tr>
<th>Type</th>
<th>Length</th>
<th>1500 Series Heavy-Duty</th>
<th>2000 Series Jumbo Extra Heavy-Duty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Chisel</td>
<td>9&quot;</td>
<td>1506</td>
<td>2005</td>
</tr>
<tr>
<td></td>
<td>12&quot;</td>
<td>1506-12</td>
<td>2005-12</td>
</tr>
<tr>
<td></td>
<td>18&quot;</td>
<td>1506-18</td>
<td>2005-18</td>
</tr>
<tr>
<td>Moil Point</td>
<td>9&quot;</td>
<td>1512</td>
<td>2011</td>
</tr>
<tr>
<td></td>
<td>12&quot;</td>
<td>1512-12</td>
<td>2011-12</td>
</tr>
<tr>
<td></td>
<td>18&quot;</td>
<td>1512-18</td>
<td>2011-18</td>
</tr>
<tr>
<td>Side Cut Chisel</td>
<td>9&quot;</td>
<td>1507</td>
<td>2006</td>
</tr>
<tr>
<td></td>
<td>12&quot;</td>
<td>1507-12</td>
<td>2006-12</td>
</tr>
<tr>
<td></td>
<td>18&quot;</td>
<td>1507-18</td>
<td>2006-18</td>
</tr>
<tr>
<td>Ripper</td>
<td>9&quot;</td>
<td>1511</td>
<td>2010</td>
</tr>
<tr>
<td>3/8&quot; Back Out Punch</td>
<td>9&quot;</td>
<td>1516</td>
<td>-</td>
</tr>
<tr>
<td>1/2&quot; Back Out Punch</td>
<td>9&quot;</td>
<td>1524-4LC</td>
<td>2019</td>
</tr>
<tr>
<td>5/8&quot; Back Out Punch</td>
<td>9&quot;</td>
<td>1524-4LC</td>
<td>-</td>
</tr>
<tr>
<td>3/4&quot; Back Out Punch</td>
<td>11&quot;</td>
<td>1524-6LC</td>
<td>-</td>
</tr>
<tr>
<td>7/8&quot; Back Out Punch</td>
<td>11&quot;</td>
<td>1524-8LC</td>
<td>-</td>
</tr>
<tr>
<td>1&quot; Back Out Punch</td>
<td>11&quot;</td>
<td>1525-4LC</td>
<td>2008BP</td>
</tr>
<tr>
<td>1-1/8&quot; Back Out Punch</td>
<td>9&quot;</td>
<td>1525-4LC</td>
<td>-</td>
</tr>
<tr>
<td>2000 Series Side Cut Chisel</td>
<td>9&quot;</td>
<td>1525-4LC</td>
<td>-</td>
</tr>
<tr>
<td>5/8&quot; Back Out Punch</td>
<td>11&quot;</td>
<td>1525-6LC</td>
<td>-</td>
</tr>
<tr>
<td>7/8&quot; Back Out Punch</td>
<td>13&quot;</td>
<td>1525-8LC</td>
<td>-</td>
</tr>
<tr>
<td>2000 Series Non-Sparking Ripper</td>
<td>9-1/2&quot;</td>
<td>295BC</td>
<td>-</td>
</tr>
<tr>
<td>2000 Series Wide Chisels</td>
<td>15&quot;</td>
<td>5602</td>
<td>-</td>
</tr>
<tr>
<td>2000 Series Side Cut Chisel</td>
<td>8&quot;</td>
<td>115SD</td>
<td>-</td>
</tr>
</tbody>
</table>

Retainer Parts

<table>
<thead>
<tr>
<th>Type</th>
<th>Model No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety Retainer</td>
<td>190 Series</td>
</tr>
<tr>
<td>Lock Spring</td>
<td>194</td>
</tr>
<tr>
<td>Upper Sleeve</td>
<td>1502</td>
</tr>
<tr>
<td>Lower Sleeve</td>
<td>1504</td>
</tr>
<tr>
<td>Lower Sleeve (spl)</td>
<td>1504S</td>
</tr>
<tr>
<td>Rubber Bumper</td>
<td>1505</td>
</tr>
<tr>
<td>Poly Bumper</td>
<td>1505P</td>
</tr>
</tbody>
</table>

Rail Road Spike Driver

<table>
<thead>
<tr>
<th>Type</th>
<th>Length</th>
<th>Model No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1/2&quot; Shank Spike Driver</td>
<td>8&quot;</td>
<td>115SD</td>
</tr>
</tbody>
</table>

Rivet Buster Retainers - for other manufacturers

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Fits Tool</th>
<th>(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>190-2.400</td>
<td>Jet RB-90, MP-RB90-J</td>
<td>2.400*</td>
</tr>
<tr>
<td>190-2.445</td>
<td>CP-40, 50, 60, 80, 90</td>
<td>2.445*</td>
</tr>
<tr>
<td>2190-2.557</td>
<td>CP-4181, MP-4181</td>
<td>2.557*</td>
</tr>
<tr>
<td>2190-2.565</td>
<td>Toku RB-110</td>
<td>2.565*</td>
</tr>
<tr>
<td>2190-2.400</td>
<td>Jet RB-91, MP-RB91-1-J</td>
<td>2.400*</td>
</tr>
<tr>
<td>2190-2.445</td>
<td>CP-40, 50, 60, 80, 90</td>
<td>2.445*</td>
</tr>
<tr>
<td>2190-2.385</td>
<td>Thor-11RB, Kent 800, 1100</td>
<td>2.385*</td>
</tr>
<tr>
<td>190-2.385</td>
<td>Thor-53, 63, 83, 93</td>
<td>2.385*</td>
</tr>
<tr>
<td>1851</td>
<td>APT-133, Thor-283</td>
<td>2.610*</td>
</tr>
<tr>
<td>9001-200</td>
<td>IR-9001</td>
<td>2.500*</td>
</tr>
</tbody>
</table>

#2035 Conversion Kit

Converts all rivet busters with 190 retainer to take 2000 Series jumbo extra heavy-duty tools without a new hammer or retainer.

<table>
<thead>
<tr>
<th>Description</th>
<th>Model No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Sleeve</td>
<td>2000</td>
</tr>
<tr>
<td>Lower Sleeve</td>
<td>2003</td>
</tr>
<tr>
<td>Rubber Bumper</td>
<td>1505</td>
</tr>
<tr>
<td>Complete Kit</td>
<td>2035</td>
</tr>
</tbody>
</table>

Any rivet hammer can be converted to a rivet buster by grooving barrel and adding retainer parts. Please specify make and model of hammer when ordering retainer.
Michigan Pneumatic  Model MP-CH2R - Round  
Model MP-CH2H - Hex

**Heavy-Duty Chipping Hammer**

Four bolt design eliminates handle breakage. Includes chisel retainer and chisel retainer spring. Aluminum handle model available. Most parts interchangeable with Sullair CH series chipping hammers.

<table>
<thead>
<tr>
<th>Spec</th>
<th>MP-CH2R</th>
<th>MP-CH2H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blows Per Minute</td>
<td>2300</td>
<td>2100</td>
</tr>
<tr>
<td>Stroke</td>
<td>3&quot;</td>
<td>3-3/4&quot;</td>
</tr>
<tr>
<td>Bore</td>
<td>1-1/8&quot;</td>
<td>1-1/8&quot;</td>
</tr>
<tr>
<td>Shank Diameter</td>
<td>.580H/.680R</td>
<td>.580H/.680R</td>
</tr>
<tr>
<td>Length</td>
<td>14&quot;</td>
<td>15-1/4&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>17 lbs.</td>
<td>18.5 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/2&quot;</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>26 cfm</td>
<td>30 cfm</td>
</tr>
</tbody>
</table>

Chicago Pneumatic  Model CP-4100-2R - Round  
Model CP-4100-2H - Hex

**Pick Hammer**

Ideal for metal removal in foundries, petro-chemical plants, fabrication shops and shipyards. Features a simplate valve for smooth, powerful operation. Uses round collar moil points and narrow chisels only.

<table>
<thead>
<tr>
<th>Spec</th>
<th>CP-4100-2R</th>
<th>CP-4100-2H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blows Per Minute</td>
<td>3000</td>
<td>2500</td>
</tr>
<tr>
<td>Stroke</td>
<td>2-1/2&quot;</td>
<td>3-1/2&quot;</td>
</tr>
<tr>
<td>Bore</td>
<td>3/4&quot;</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>Shank Diameter</td>
<td>.580H/0.680R</td>
<td>.580H/0.680R</td>
</tr>
<tr>
<td>Length</td>
<td>13&quot;</td>
<td>15&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>5.25 lbs.</td>
<td>6.125 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>16 cfm</td>
<td>16 cfm</td>
</tr>
</tbody>
</table>

Chicago Pneumatic  Model CP-4100-3H - Hex

**Pick Hammer**

Powerful, lightweight tool is ideal for use in horizontal and overhead demolition of concrete, stone and masonry structures. Also well suited for metal removal in foundries, petro chemical plants, fabrication shops and shipyards. Features a simplate valve for smooth, powerful operation. Uses round collar 0.580 hex shank moil points and narrow chisels only.

<table>
<thead>
<tr>
<th>Spec</th>
<th>CP-4100-3H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blows Per Minute</td>
<td>2500</td>
</tr>
<tr>
<td>Stroke</td>
<td>3-1/2&quot;</td>
</tr>
<tr>
<td>Bore</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>Shank Diameter</td>
<td>.580H</td>
</tr>
<tr>
<td>Length</td>
<td>15&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>6.125 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>16 cfm</td>
</tr>
</tbody>
</table>
## Retainer Type Chipping Hammers

**Michigan Pneumatic**  
**Model MP-4113R - Round**  
**Model MP-4113H - Hex**

### Mini Chipping Hammer

Compact, lightweight chipping hammer designed for working in tight spaces or small enclosures. Smooth throttle, easy to hold, and powerful for its size. Please specify hex or round shank.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1190-1.655</td>
<td>Retainer</td>
</tr>
<tr>
<td>1194-2</td>
<td>Retainer Spring</td>
</tr>
</tbody>
</table>

### Specifications:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blows Per Minute</td>
<td>3200</td>
</tr>
<tr>
<td>Stroke</td>
<td>1.8&quot;</td>
</tr>
<tr>
<td>Bore</td>
<td>0.88&quot;</td>
</tr>
<tr>
<td>Length w/Retainer</td>
<td>12-3/4&quot;</td>
</tr>
<tr>
<td>Weight w/Retainer</td>
<td>7.9 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic**  
**Model MP-1100R - Round**  
**Model MP-1100H - Hex**

### Retainer Chipping Hammer

Lightweight, durable, medium-duty tools designed for cleaning castings, bushing concrete, and cutting or chipping masonry materials of all types. Ideal for shipyards, foundries and contractors. Parts are interchangeable with CP-9362, 3 and 4 series chippers. Please specify hex or round shank.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1190-MPT1</td>
<td>Retainer</td>
</tr>
<tr>
<td>1194-2</td>
<td>Retainer Spring</td>
</tr>
</tbody>
</table>

### Specifications:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blows Per Minute</td>
<td>2800</td>
</tr>
<tr>
<td>Stroke</td>
<td>1&quot;</td>
</tr>
<tr>
<td>Bore</td>
<td>1-1/8&quot;</td>
</tr>
<tr>
<td>Length w/Retainer</td>
<td>13-1/2&quot;</td>
</tr>
<tr>
<td>Weight w/Retainer</td>
<td>14.75 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic**  
**Model MP-2200R - Round**  
**Model MP-2200H - Hex**

### Retainer Chipping Hammer

Lightweight, durable, medium-duty tools designed for cleaning castings, bushing concrete, and cutting or chipping masonry materials of all types. Ideal for shipyards, foundries and contractors. Parts are interchangeable with CP-9362, 3 and 4 series chippers. Please specify hex or round shank.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1190-MPT1</td>
<td>Retainer</td>
</tr>
<tr>
<td>1194-2</td>
<td>Retainer Spring</td>
</tr>
</tbody>
</table>

### Specifications:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blows Per Minute</td>
<td>2150</td>
</tr>
<tr>
<td>Stroke</td>
<td>2&quot;</td>
</tr>
<tr>
<td>Bore</td>
<td>1-1/8&quot;</td>
</tr>
<tr>
<td>Length w/Retainer</td>
<td>15-1/2&quot;</td>
</tr>
<tr>
<td>Weight w/Retainer</td>
<td>15.75 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic**  
**Model MP-3300R - Round**  
**Model MP-3300H - Hex**

### Retainer Chipping Hammer

Ideal for medium to heavy-duty chipping jobs. Great for paper stripping and weld destruct applications. Heat treated pistons and barrels resist wear and add longevity. Parts are interchangeable with CP-9362, 3 and 4 series chippers. Please specify hex or round shank.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1190-MPT1</td>
<td>Retainer</td>
</tr>
<tr>
<td>1194-2</td>
<td>Retainer Spring</td>
</tr>
</tbody>
</table>

### Specifications:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blows Per Minute</td>
<td>1900</td>
</tr>
<tr>
<td>Stroke</td>
<td>3&quot;</td>
</tr>
<tr>
<td>Bore</td>
<td>1-1/8&quot;</td>
</tr>
<tr>
<td>Length w/Retainer</td>
<td>16-1/4&quot;</td>
</tr>
<tr>
<td>Weight w/Retainer</td>
<td>16.40 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic**  
**Model MP-4400R - Round**  
**Model MP-4400H - Hex**

### Retainer Chipping Hammer

Features a cast steel handle for long life and operator comfort. Designed for heavy-duty jobs where power and reliability are a must. Great for demolition, riveting and cutting steel. Parts are interchangeable with CP-9362, 3 and 4 series chippers. Please specify hex or round shank.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1190-MPT1</td>
<td>Retainer</td>
</tr>
<tr>
<td>1194-2</td>
<td>Retainer Spring</td>
</tr>
</tbody>
</table>

### Specifications:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blows Per Minute</td>
<td>1500</td>
</tr>
<tr>
<td>Stroke</td>
<td>1-1/4&quot;</td>
</tr>
<tr>
<td>Bore</td>
<td>1-1/8&quot;</td>
</tr>
<tr>
<td>Length w/Retainer</td>
<td>18-1/4&quot;</td>
</tr>
<tr>
<td>Weight w/Retainer</td>
<td>17.70 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
</tbody>
</table>

See pages 112-113 for chipping hammer accessories.
**Industrial Chipping Hammers**

**Michigan Pneumatic**

**Model MP-K2LR-RET - Round**

**Model MP-K2LH-RET - Hex**

**Chipping Hammer**

Smallest line of chippers featuring standard .580 hex or .680 round shank bushing. **Parts interchangeable with Ingersoll-Rand K2L models. Please specify hex or round shank.**

<table>
<thead>
<tr>
<th>Blows Per Minute</th>
<th>Stroke</th>
<th>Bore</th>
<th>Length</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>3600</td>
<td>1-3/4&quot;</td>
<td>7/8&quot;</td>
<td>12&quot;</td>
<td>8 lbs.</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic**

**Model MP-100CR-RET - Round**

**Model MP-100CH-RET - Hex**

**Retainer Chipping Hammers**

Powerful, lightweight tools available in four sizes for chipping, beading, cleaning castings, cutting, and roughening concrete and masonry. Designed for rugged use in any application. **Parts are interchangeable with Chicago Pneumatic Simplate chippers. Please specify hex or round shank.**

<table>
<thead>
<tr>
<th>Blows Per Minute</th>
<th>Stroke</th>
<th>Bore</th>
<th>Length w/Retainer</th>
<th>Weight w/Retainer</th>
</tr>
</thead>
<tbody>
<tr>
<td>2800</td>
<td>1&quot;</td>
<td>1-1/8&quot;</td>
<td>13-3/4&quot;</td>
<td>14.00 lbs.</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic**

**Model MP-200CR-RET - Round**

**Model MP-200CH-RET - Hex**

**Retainer Chipping Hammers**

Excellent for chipping, scaling, cleaning work on castings, billets and paper box stripping. Smooth throttle characteristics, easy to hold, powerful for its size. Simplate valve design provides excellent controllability. **Parts are interchangeable with Chicago Pneumatic Simplate chippers. Please specify hex or round shank.**

<table>
<thead>
<tr>
<th>Blows Per Minute</th>
<th>Stroke</th>
<th>Bore</th>
<th>Length w/Retainer</th>
<th>Weight w/Retainer</th>
</tr>
</thead>
<tbody>
<tr>
<td>2200</td>
<td>2&quot;</td>
<td>1-1/8&quot;</td>
<td>14-1/2&quot;</td>
<td>14.90 lbs.</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic**

**Model MP-300CR-RET - Round**

**Model MP-300CH-RET - Hex**

**Retainer Chipping Hammers**

Deliver fast, powerful blows and produce maximum energy with minimal tool weight for medium to extra heavy-duty chipping. Virtually trouble free Simplate valve design. Rugged design for all heavy-duty chipping applications. **Parts are interchangeable with Chicago Pneumatic Simplate chippers. Please specify hex or round shank.**

<table>
<thead>
<tr>
<th>Blows Per Minute</th>
<th>Stroke</th>
<th>Bore</th>
<th>Length w/Retainer</th>
<th>Weight w/Retainer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1700</td>
<td>3&quot;</td>
<td>1-1/8&quot;</td>
<td>16-1/2&quot;</td>
<td>17.10 lbs.</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic**

**Model MP-400CR-RET - Round**

**Model MP-400CH-RET - Hex**

**Retainer Chipping Hammers**

Streamlined design for heavy riveting, chipping, scaling, beading. Many different uses, including paper box stripping and cutting defective welds. Designed for rugged use in foundries and construction applications. **Parts are interchangeable with Chicago Pneumatic Simplate chippers. Please specify hex or round shank.**

<table>
<thead>
<tr>
<th>Blows Per Minute</th>
<th>Stroke</th>
<th>Bore</th>
<th>Length w/Retainer</th>
<th>Weight w/Retainer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1450</td>
<td>4&quot;</td>
<td>1-1/8&quot;</td>
<td>17-3/4&quot;</td>
<td>18.00 lbs.</td>
</tr>
</tbody>
</table>

See pages 112-113 for chipping hammer accessories.
MPT chisels are manufactured from the finest alloys available for Michigan Pneumatic retainer type chippers, as well as other manufacturers chippers. Each chisel is hardened and tempered throughout to provide maximum strength and resistance to fatigue, then carefully inspected to meet the rigid MPT quality standards.

Round collar shank style chisels are also available. Longer lengths up to 72" are available. Please specify part number when ordering.

### Blade Style

<table>
<thead>
<tr>
<th>Blade Style</th>
<th>9&quot;</th>
<th>12&quot;</th>
<th>18&quot;</th>
<th>24&quot;</th>
<th>36&quot;</th>
<th>48&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blank</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Round</td>
<td>301</td>
<td>301-12</td>
<td>301-18</td>
<td>301-24</td>
<td>301-36</td>
</tr>
<tr>
<td></td>
<td>Hex</td>
<td>302</td>
<td>302-12</td>
<td>302-18</td>
<td>302-24</td>
<td>302-36</td>
</tr>
<tr>
<td>3/4&quot; Flat Chisel</td>
<td>Round</td>
<td>303</td>
<td>303-12</td>
<td>303-18</td>
<td>303-24</td>
<td>303-36</td>
</tr>
<tr>
<td></td>
<td>Hex</td>
<td>304</td>
<td>304-12</td>
<td>304-18</td>
<td>304-24</td>
<td>304-36</td>
</tr>
<tr>
<td>Moil Point</td>
<td>Round</td>
<td>313MP</td>
<td>315</td>
<td>315-18</td>
<td>315-24</td>
<td>315-36</td>
</tr>
<tr>
<td></td>
<td>Hex</td>
<td>314MP</td>
<td>316</td>
<td>316-18</td>
<td>316-24</td>
<td>316-36</td>
</tr>
<tr>
<td>2&quot; Wide Scaling Chisel</td>
<td>Round</td>
<td>323WC</td>
<td>323-12</td>
<td>323-18</td>
<td>323-24</td>
<td>323-36</td>
</tr>
<tr>
<td></td>
<td>Hex</td>
<td>324</td>
<td>324-12</td>
<td>324-18</td>
<td>324-24</td>
<td>324-36</td>
</tr>
<tr>
<td>2-1/2&quot; Non-Sparking Chisel</td>
<td>Round</td>
<td>323-BC</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Hex</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3&quot; Wide Scaling Chisel</td>
<td>Round</td>
<td>323-3</td>
<td>323-12-3</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Hex</td>
<td>324-3</td>
<td>324-12-3</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5&quot; Wide Scaling Chisel</td>
<td>Round</td>
<td>FO3805</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Hex</td>
<td>GO3805</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cape</td>
<td>Round</td>
<td>305</td>
<td>305-12</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Hex</td>
<td>306</td>
<td>306-12</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Round Nose</td>
<td>Round</td>
<td>307</td>
<td>307-12</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Hex</td>
<td>308</td>
<td>308-12</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Diamond Point</td>
<td>Round</td>
<td>309</td>
<td>309-12</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Hex</td>
<td>310</td>
<td>310-12</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bushing Tool</td>
<td>Round</td>
<td>50100</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Hex</td>
<td>50200BT</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gouge</td>
<td>Round</td>
<td>337</td>
<td>337-12</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Hex</td>
<td>338</td>
<td>338-12</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Longer lengths and other styles available. Please inquire.
Chipping Hammer Accessories

1190 Series Solid Type Chisel Retainers
For use where frequent change of chisels is not required. Retainer must be removed from hammer barrel to change chisels. To remove retainer from hammer barrel, pull 1194 series lock spring entirely out of slot in retainer and slide retainer off barrel.

Available To Fit The Following Brands And Models:

Michigan Pneumatic

<table>
<thead>
<tr>
<th>Tool Model No.</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-100 thru MP-400 series</td>
<td>1190-MPT1</td>
</tr>
<tr>
<td>MP-1100 thru MP-4400 series</td>
<td>1190-MPT1</td>
</tr>
<tr>
<td>MP-CH2 thru MP-CH4 series</td>
<td>1190-SUL1</td>
</tr>
<tr>
<td>MP-K2L series</td>
<td>1190-1.655</td>
</tr>
<tr>
<td>MP-4113 series</td>
<td>1190-1.655</td>
</tr>
</tbody>
</table>

Chicago Pneumatic

<table>
<thead>
<tr>
<th>Tool Model No.</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP-1-RV thru CP-4-RV Series</td>
<td>1190-CPT2</td>
</tr>
<tr>
<td>CP-1</td>
<td>1190-CPT1</td>
</tr>
<tr>
<td>CP-2A</td>
<td></td>
</tr>
<tr>
<td>CP-3</td>
<td></td>
</tr>
<tr>
<td>CP-4</td>
<td></td>
</tr>
<tr>
<td>CP-9362</td>
<td></td>
</tr>
<tr>
<td>CP-9363</td>
<td></td>
</tr>
<tr>
<td>CP-9364</td>
<td></td>
</tr>
<tr>
<td>CP-4113</td>
<td>1190-1.692</td>
</tr>
</tbody>
</table>

Ingersoll-Rand

<table>
<thead>
<tr>
<th>Tool Model No.</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>IR-K2L</td>
<td>1190-1.655</td>
</tr>
<tr>
<td>IR-1</td>
<td></td>
</tr>
<tr>
<td>IR-2 &amp; IR-200</td>
<td></td>
</tr>
<tr>
<td>IR-2A</td>
<td></td>
</tr>
<tr>
<td>IR-3 &amp; IR-300</td>
<td></td>
</tr>
<tr>
<td>IR-3A</td>
<td></td>
</tr>
<tr>
<td>IR-4 &amp; IR-400</td>
<td></td>
</tr>
<tr>
<td>IR-W1 thru IR-W4 Series</td>
<td>1193</td>
</tr>
</tbody>
</table>

Hitch Cutter Retainer
Designed for both oval collar and round collar tools in any width blades.

Michigan Pneumatic 1191-MPT1 Quick Change 1192-MPT1 Rapid Change
For use where frequent tool change is necessary. It is not necessary to remove retainer from hammer barrel to change tools. On the 1191 retainer, the chisel is changed by lifting the end of flat spring on outside of retainer to release lock pin, rotate tool 1/4 turn, remove tool. Insert new tool and rotate 1/4 turn. On the 1192 retainer, it is not necessary to lift the spring, simply rotate the chisel 1/4 turn and remove to change.

Replacement Rotating Insert & Retaining Ring

1191-3 for use with 1191 Quick Change series retainer
1191-7 for use with 1192 Rapid Change series retainer
1191-4 for retaining the rotating insert on both 1191 and 1192 series retainers.

Replacement Flat Spring & Pin

1191-2 for use with 1191 Quick Change series retainer
1191-6 for use with 1192 Rapid Change series retainer

Lock Spring for All Retainers

1194-2 Heavy-Duty Wire Spring
1194-5 Solid Urethane Lock Spring

Deluxe Ball Type Chisel Retainer
Designed for rapid change of tools without removing retainer from barrel. Tool is quickly changed by pulling back sleeve to unlock tool in retainer. Releasing sleeve back to normal position locks tool in retainer. Takes both oval collar and round collar tools in any width blades.

OSHA regulations specify that retainers shall be used to prevent accidental expulsion of tools. Retainers are available for all models of chipping hammers. Please specify model of chipping hammer when ordering. All accessories are made in U.S.A.
Chipping Hammers

Michigan Pneumatic

**W-Style Chipping Hammer**

When conventional tapered style retainers fail prematurely, the acme thread style chipping hammers are put into service. The heavy-duty retainer mechanism has two sets of steel sleeves and a rubber bumper to disperse and absorb the blows of the chisel. W-style chippers use oval or round collar chisels. See page 112 for additional accessories. Please specify hex or round shank.

**Chipping Hammer Retainer & Parts**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HHW1-300</td>
<td>Retainer</td>
</tr>
<tr>
<td>HHW1-213</td>
<td>Lower Washer</td>
</tr>
<tr>
<td>R00A2-103</td>
<td>O-Ring</td>
</tr>
<tr>
<td>24SR-207</td>
<td>Retainer Spring</td>
</tr>
<tr>
<td>H3R-31</td>
<td>Upper Washer</td>
</tr>
<tr>
<td>H3R-203</td>
<td>Rubber Bumper</td>
</tr>
</tbody>
</table>

**Chipping Hammers**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Blows Per Minute</th>
<th>Stroke</th>
<th>Bore</th>
<th>Length</th>
<th>Weight</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-W1R</td>
<td>2500</td>
<td>1”</td>
<td>1-1/8”</td>
<td>15-7/8”</td>
<td>14.75 lbs.</td>
<td>1/2”</td>
<td>3/8”</td>
<td>28 cfm</td>
</tr>
<tr>
<td>MP-W1H</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP-W2R</td>
<td>2300</td>
<td>2”</td>
<td>1-1/8”</td>
<td>16-3/8”</td>
<td>15.50 lbs.</td>
<td>1/2”</td>
<td>3/8”</td>
<td>28 cfm</td>
</tr>
<tr>
<td>MP-W2H</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP-W3R</td>
<td>1725</td>
<td>3”</td>
<td>1-1/8”</td>
<td>18-1/4”</td>
<td>16.60 lbs.</td>
<td>1/2”</td>
<td>3/8”</td>
<td>29 cfm</td>
</tr>
<tr>
<td>MP-W3H</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP-W4R</td>
<td>1480</td>
<td>4”</td>
<td>1-1/8”</td>
<td>19-1/4”</td>
<td>17.50 lbs.</td>
<td>1/2”</td>
<td>3/8”</td>
<td>29 cfm</td>
</tr>
<tr>
<td>MP-W4H</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Michigan Pneumatic Model MP-3000C-U**

**Core Knock-Out Tool**

Designed to remove or rattle sand, shell cores or molds from castings. Equipped with anvil, retainer and mounting brackets.

**300016** Mounting Bracket Complete

<table>
<thead>
<tr>
<th>Blows Per Minute</th>
<th>1700</th>
<th>Length w/Retainer</th>
<th>14”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke</td>
<td>3”</td>
<td>Weight w/Mount</td>
<td>21.75 lbs.</td>
</tr>
<tr>
<td>Bore</td>
<td>1-1/8”</td>
<td>Air Inlet Thread</td>
<td>3/8”</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic Model MP-MA1R - Round**

**Model MP-MA1H - Hex**

You cannot afford to do overhead concrete repair work or chipping without one. Lightweight chipper for heavy-duty jobs. Parts interchangeable with MasterPower or Black & Decker models. Please specify hex or round shank.

<table>
<thead>
<tr>
<th>Blows Per Minute</th>
<th>2800</th>
<th>Length w/ Retainer</th>
<th>11-7/8”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke</td>
<td>1”</td>
<td>Weight w/ Retainer</td>
<td>12.5 lbs.</td>
</tr>
<tr>
<td>Bore</td>
<td>1-1/8”</td>
<td>Air Inlet Thread</td>
<td>3/8”</td>
</tr>
</tbody>
</table>
Straight & Needle Scalers

**Michigan Pneumatic Model MP-1BL**

**Scaling Hammer** - Lever Throttle

New, improved design features smooth action throttling characteristics. Easy to handle, powerful tool widely used as a general purpose hammer for chipping stone, metal, concrete, brick and for carving wood. Chisels are held firmly in place and cannot rotate. Chisels easily changed with a quick release lever. Parts interchangeable with Cleco B1A scaler.

Takes style 200 - 1/2" square chisel.

<table>
<thead>
<tr>
<th>Bore</th>
<th>1&quot;</th>
<th>Length</th>
<th>10-1/4&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke</td>
<td>1-1/8&quot;</td>
<td>Weight</td>
<td>3.625 lbs.</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>4600</td>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/4&quot;</td>
<td>Avg. Air Consumption</td>
<td>6 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic Model MP-1BLNS**

**Needle Scaler** - Lever Throttle

Excellent for removing weld splatter, rust, paint and other debris from many different and unusual surfaces and in hard-to-reach places. Ideal for construction sites, fabrication shops, refineries and foundries. Parts interchangeable with Cleco Model B1A scaler.

Takes style 200 - 1/2" square chisel.

<table>
<thead>
<tr>
<th>Bore</th>
<th>15/16&quot;</th>
<th>Length</th>
<th>9&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke</td>
<td>1-1/16&quot;</td>
<td>Weight</td>
<td>4.00 lbs.</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>4000</td>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/4&quot;</td>
<td>Avg. Air Consumption</td>
<td>13 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic Model MP-182L**

**Scaling Hammer** - Lever Throttle

Ideal for removing weld splatter, rust, scale and debris from hard to reach surfaces. Useful in oil fields, fabrication shops, petro-chemical plants and foundries. Gooseneck handle and push throttle hammers also available. Parts interchangeable with Ingersoll-Rand Model 182.

Takes style 100 - 1/2" quarter octagon chisel.

<table>
<thead>
<tr>
<th>Bore</th>
<th>15/16&quot;</th>
<th>Length</th>
<th>17&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke</td>
<td>1-1/16&quot;</td>
<td>Weight</td>
<td>5.75 lbs.</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>4000</td>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/4&quot;</td>
<td>Avg. Air Consumption</td>
<td>13 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic Model MP-182LNS**

**Needle Scaler** - Lever Throttle

Useful in oil fields, fabrication shops, petro-chemical plants and foundries. Ideal for removing weld splatter, rust, scale and debris from hard to reach surfaces. Push throttle hammers also available. Parts interchangeable with Ingersoll-Rand Model 182.

Takes style 100 - 1/2" quarter octagon chisel.

<table>
<thead>
<tr>
<th>Bore</th>
<th>15/16&quot;</th>
<th>Length</th>
<th>17&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke</td>
<td>1-1/16&quot;</td>
<td>Weight</td>
<td>5.75 lbs.</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>4000</td>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/4&quot;</td>
<td>Avg. Air Consumption</td>
<td>13 cfm</td>
</tr>
</tbody>
</table>

See page 119 for scaler chisels. See page 120 for additional needle styles.
### Cleco-Style Industrial Scalers

#### Michigan Pneumatic  Model MP-1BL-COKE OVEN
**Coke Oven Scaler - Non-Revolving Push Throttle**

Designed to be attached to long air pipes to remove debris from oven bricks used in the steel industry. Features a simple push throttle. **Model MP-1BL-SBKHD** with solid back head available.

<table>
<thead>
<tr>
<th>Takes style 200 - 1/2&quot; square chisel.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bore: 1&quot;</td>
</tr>
<tr>
<td>Stroke: 1-1/8&quot;</td>
</tr>
<tr>
<td>Blows Per Minute: 4600</td>
</tr>
<tr>
<td>Rec’d Hose Size: 1/4&quot;</td>
</tr>
</tbody>
</table>

#### Michigan Pneumatic  Model MP-P-1BL
**Scaling Hammer - Push Throttle**

Popular scaling hammer for its high speed action, short length and light weight. Widely used for light chipping, caulking and scaling in steel mills, foundries and assembly shops. Ideal for close quarter work. **Parts interchangeable with Cleco B1A scaler. Model MP-P-1SR-1392 needle scaler available.**

<table>
<thead>
<tr>
<th>Takes style 200 - 1/2&quot; square chisel.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bore: 1&quot;</td>
</tr>
<tr>
<td>Stroke: 1-1/8&quot;</td>
</tr>
<tr>
<td>Blows Per Minute: 4600</td>
</tr>
<tr>
<td>Rec’d Hose Size: 1/4&quot;</td>
</tr>
</tbody>
</table>

#### Michigan Pneumatic  Model MP-G-1SR
**Scaling Hammer - Gooseneck Throttle**

Designed for long-term scaling jobs, featuring a strategically positioned, ergonomic handle for comfortable operation. The handle allows the operator’s wrist to function in natural position, reducing fatigue. **Parts interchangeable with Cleco B1-A-BV. Model MP-G-1SR-1392 needle scaler available.**

<table>
<thead>
<tr>
<th>Takes style 200 - 1/2&quot; square chisel.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bore: 1&quot;</td>
</tr>
<tr>
<td>Stroke: 1-1/8&quot;</td>
</tr>
<tr>
<td>Blows Per Minute: 4600</td>
</tr>
<tr>
<td>Rec’d Hose Size: 1/4&quot;</td>
</tr>
</tbody>
</table>

#### Michigan Pneumatic  Model MP-PG-1SR
**Scaling Hammer - Offset Grip Throttle**

A built-in power regulator allows the operator to adjust the hitting power to prevent damage to softer castings and surfaces. Cleans rust, scale, paint and other coatings from nearly any surface. **Parts interchangeable with Cleco B1-A-BV. Model MP-PG-1SR-1392 needle scaler available.**

<table>
<thead>
<tr>
<th>Takes style 200 - 1/2&quot; square chisel.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bore: 1&quot;</td>
</tr>
<tr>
<td>Stroke: 1-1/8&quot;</td>
</tr>
<tr>
<td>Blows Per Minute: 4600</td>
</tr>
<tr>
<td>Rec’d Hose Size: 1/4&quot;</td>
</tr>
</tbody>
</table>

---

See page 119 for weldflux scaler chisels.
Michigan Pneumatic  Model MP-L-455C
Scaling Hammer - Lever Throttle

Takes style 100 - 1/2" quarter octagon chisel.

<table>
<thead>
<tr>
<th>Bore</th>
<th>1&quot;</th>
<th>Length</th>
<th>10-3/8&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke</td>
<td>1-1/8&quot;</td>
<td>Weight</td>
<td>4 lbs.</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>4200</td>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/4&quot;</td>
<td>Avg. Air Consumption</td>
<td>6 cfm</td>
</tr>
</tbody>
</table>

Michigan Pneumatic  Model MP-P-455C
Scaling Hammer - Push Throttle
Controlled by a push type throttle. Push the throttle for hammer action. Widely used for scaling and chipping in shipyards and machine shops. Also used for light scale removal on airplanes and for ironing sheet metal. Parts interchangeable with Cleco BR scaler. Model MP-P-455C-1394 needle scaler available.

Takes style 100 - 1/2" quarter octagon chisel.

<table>
<thead>
<tr>
<th>Bore</th>
<th>1&quot;</th>
<th>Length</th>
<th>12-1/8&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke</td>
<td>1-1/8&quot;</td>
<td>Weight</td>
<td>4 lbs.</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>4200</td>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/4&quot;</td>
<td>Avg. Air Consumption</td>
<td>6 cfm</td>
</tr>
</tbody>
</table>

Michigan Pneumatic  Model MP-G-455C
Scaling Hammer - Gooseneck Throttle
Features power for the heaviest scaling jobs and an ergonomic handle to reduce operator fatigue and increase production. Outstanding for scaling castings and removing paint or rust. Model MP-G-455C-1394 needle scaler available.

Takes style 100 - 1/2" quarter octagon chisel.

<table>
<thead>
<tr>
<th>Bore</th>
<th>1&quot;</th>
<th>Length</th>
<th>12-7/8&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke</td>
<td>1-1/8&quot;</td>
<td>Weight</td>
<td>3.875 lbs.</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>4200</td>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/4&quot;</td>
<td>Avg. Air Consumption</td>
<td>6 cfm</td>
</tr>
</tbody>
</table>

Michigan Pneumatic  Model MP-PG-455C
Scaling Hammer - Offset Grip Throttle
Features an offset handle for operator comfort and single finger operation. Ideal for scaling rust removal, peening and tank cleaning. Model MP-PG-455C-1394 needle scaler available.

Takes style 100 - 1/2" quarter octagon chisel.

<table>
<thead>
<tr>
<th>Bore</th>
<th>1&quot;</th>
<th>Length</th>
<th>10&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroke</td>
<td>1-1/8&quot;</td>
<td>Weight</td>
<td>5.5 lbs.</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>4600</td>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>1/4&quot;</td>
<td>Avg. Air Consumption</td>
<td>6 cfm</td>
</tr>
</tbody>
</table>

See page 119 for weldflux scaler chisels.
Long Reach Scalers

Michigan Pneumatic  Model MP-1SR-LR

Long Reach Scaler
Easy to handle, powerful tool widely used as a general purpose hammer for chipping stone, metal, concrete, brick and carving wood.

HG-37412  Stopper
HG-37434  Stopper Spring
HG-37213  Cushion Seat
390-3  3" Wide Chisel

Style 200 - 1/2" square chisel
Chisel not included

Michigan Pneumatic  Model MP-2LRCS

Long Reach Scaler
Ideal for tile, glue, resin, grease and paint removal. Hits twice as hard as a regular scaler.

389  2" Wide Chisel
389-3  3" Wide Chisel

Style 300 chisel - 1/2" quarter octagon chisel
Includes 3" Wide Chisel

Michigan Pneumatic  Model MP-2200R-LR - Round
Model MP-2200H-LR - Hex

Long Reach Scaler
Hits twice as hard as a regular scaler. Ideal for tile, paint, glue, resin, barnacle and heavy scale removal. Please specify hex or round shank.

FO3805  Round Shank 5" Wide Chisel
GO3805  Hex Shank 5" Wide Chisel
1190-MPT1  Retainer
1194-2  Retainer Spring

Chisel not included

Michigan Pneumatic  Model MP-CH3R-LR - Round
Model MP-CH3H-LR - Hex

Long Reach Scaler
Powerful tool for chipping, beading, cleaning castings, cutting, and roughening concrete and masonry. Designed for rugged use in any application. Please specify hex or round shank.

FO3805  Round Shank 5" Wide Chisel
GO3805  Hex Shank 5" Wide Chisel
1190-SUL1  Retainer
1194-2  Retainer Spring

Chisel not included

See pages 112-113 for chipping hammer accessories. See page 119 for weldflux scaler chisels.
Weldflux Scaler Chisels & Accessories

**Style 100**
1/2” Quarter Octagon Stock

<table>
<thead>
<tr>
<th>Blade Style</th>
<th>Length</th>
<th>Width of Cut</th>
<th>Style 100</th>
<th>Style 200</th>
<th>Style 300</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blank Chisel</td>
<td>7&quot;</td>
<td>12&quot;</td>
<td>395</td>
<td>391</td>
<td>385</td>
</tr>
<tr>
<td></td>
<td>18&quot;</td>
<td></td>
<td>395-12</td>
<td>391-12</td>
<td>385-12</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>395-18</td>
<td>391-18</td>
<td>385-18</td>
</tr>
<tr>
<td>Narrow Flat Chisel</td>
<td>7&quot;</td>
<td>12&quot;</td>
<td>396</td>
<td>392</td>
<td>386</td>
</tr>
<tr>
<td></td>
<td></td>
<td>18&quot;</td>
<td>396-12</td>
<td>392-12</td>
<td>386-12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3/4&quot;</td>
<td>396-18</td>
<td>392-18</td>
<td>386-18</td>
</tr>
<tr>
<td>Wide Scaling Chisel</td>
<td>7&quot;</td>
<td>12&quot;</td>
<td>397</td>
<td>393</td>
<td>387</td>
</tr>
<tr>
<td></td>
<td></td>
<td>18&quot;</td>
<td>397-12</td>
<td>393-12</td>
<td>387-12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-3/8&quot;</td>
<td>397-18</td>
<td>393-18</td>
<td>387-18</td>
</tr>
<tr>
<td>Angle Scaling Chisel</td>
<td>7&quot;</td>
<td>12&quot;</td>
<td>398</td>
<td>394</td>
<td>388</td>
</tr>
<tr>
<td></td>
<td></td>
<td>18&quot;</td>
<td>398-12</td>
<td>394-12</td>
<td>388-12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-3/8&quot;</td>
<td>398-18</td>
<td>394-18</td>
<td>388-18</td>
</tr>
<tr>
<td>2&quot; Scraper &amp; 3&quot; Scraper</td>
<td>7&quot;</td>
<td>2&quot;</td>
<td>399</td>
<td>390</td>
<td>389</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3&quot;</td>
<td>399-3</td>
<td>390-3</td>
<td>389-3</td>
</tr>
<tr>
<td>Cape Chisel</td>
<td>7&quot;</td>
<td>1/4&quot;</td>
<td>3226</td>
<td>3232</td>
<td>-</td>
</tr>
<tr>
<td>Diamond Point Chisel</td>
<td>7&quot;</td>
<td>1/4&quot;</td>
<td>3224</td>
<td>3230</td>
<td>-</td>
</tr>
<tr>
<td>Round Hose Chisel</td>
<td>7&quot;</td>
<td>1/4&quot;</td>
<td>3225</td>
<td>3231</td>
<td>-</td>
</tr>
<tr>
<td>Non-Sparking Chisel</td>
<td>8&quot;</td>
<td>2&quot;</td>
<td>380-BC</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Please specify part number when ordering. Longer lengths and other blade styles also available.

**Complete Needle Scaler Attachment and Replacement Parts**

**Model 1392** Needle Attachment
Fits MP-1SR Series & Cleco

**Replacement Parts for Model 1392**

<table>
<thead>
<tr>
<th>MPT Part No.</th>
<th>Cleco Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1370</td>
<td>834779</td>
<td>Needle Tube</td>
</tr>
<tr>
<td>1371</td>
<td>834044</td>
<td>Spring</td>
</tr>
<tr>
<td>3mm19</td>
<td>834024</td>
<td>Needle Set</td>
</tr>
<tr>
<td>375</td>
<td>834046</td>
<td>Needle Holder</td>
</tr>
<tr>
<td>373</td>
<td>834045</td>
<td>Driver</td>
</tr>
</tbody>
</table>

**Model 1393** Needle Attachment
Fits MP-182 Series & Ingersoll-Rand

**Replacement Parts for Model 1393**

<table>
<thead>
<tr>
<th>MPT Part No.</th>
<th>IR Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1380</td>
<td>NS11-A24</td>
<td>Needle Tube</td>
</tr>
<tr>
<td>1381</td>
<td>NS11-A25</td>
<td>Spring</td>
</tr>
<tr>
<td>3mm19</td>
<td>NS11-27</td>
<td>Needle Set</td>
</tr>
<tr>
<td>371</td>
<td>NS11-21</td>
<td>Needle Holder</td>
</tr>
</tbody>
</table>

**Model 1394** Needle Attachment
Fits MP-455C Series & CP-455

**Replacement Parts for Model 1394**

<table>
<thead>
<tr>
<th>MPT Part No.</th>
<th>CP Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1350</td>
<td>P100151</td>
<td>Needle Tube</td>
</tr>
<tr>
<td>1371</td>
<td>P100150</td>
<td>Spring</td>
</tr>
<tr>
<td>3mm19</td>
<td>P100146</td>
<td>Needle Set</td>
</tr>
<tr>
<td>375</td>
<td>P100145</td>
<td>Needle Holder</td>
</tr>
<tr>
<td>374</td>
<td>P100144</td>
<td>Driver</td>
</tr>
</tbody>
</table>

Stainless Steel and Beryllium Copper needles available. See page 120 for additional needle styles.
**Needle Scalers & Replacement Needles**

### Nitto Kohki Model JT-20

**Needle Scaler**

This lightweight, ergonomic needle scaler is used for de-slagging welds, cleaning brick, stonework, boats and many other surfaces. Ideal for heavy paint removal. The needles conform to any surface contour.

**Replacement Parts**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>(size x qty/set)</th>
<th>Part No.</th>
<th>(size x qty/set)</th>
<th>Part No.</th>
<th>(size x qty/set)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2mm29</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2mm32</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2mm51</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2mm65</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2mm111</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3mm12</td>
<td>3mm12P</td>
<td>3mm12C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3mm15</td>
<td>3mm15P</td>
<td>3mm15C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3mm19</td>
<td>3mm19P</td>
<td>3mm19C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3mm28</td>
<td>3mm28P</td>
<td>3mm28C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3mm49</td>
<td>3mm49P</td>
<td>3mm49C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4mm7</td>
<td>4mm7P</td>
<td>4mm7C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4mm10</td>
<td>4mm10P</td>
<td>4mm10C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4mm19</td>
<td>4mm19P</td>
<td>4mm19C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4mm35</td>
<td>4mm35P</td>
<td>4mm35C</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Nitto Kohki Model JEX-20

**Needle Scaler**

This ergonomic needle scaler is used for cleaning brick and stonework, de-slagging welds, cleaning boat hulls and many other surfaces. Ideal for heavy paint removal.

**Replacement Parts**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>(size x qty/set)</th>
<th>Part No.</th>
<th>(size x qty/set)</th>
<th>Part No.</th>
<th>(size x qty/set)</th>
</tr>
</thead>
<tbody>
<tr>
<td>00A342-29</td>
<td>2mm Needle Set (29 pc.)</td>
<td>00A338</td>
<td>2mm Supporter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>00A341-12</td>
<td>3mm Needle Set (12 pc.)</td>
<td>00A337</td>
<td>3mm Supporter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>00A332</td>
<td>Piston</td>
<td>00A336</td>
<td>Anvil</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Michigan Pneumatic Model MP-25NS

**Needle Scaler**

Very powerful for its size. Ideal for use as a chisel gun for cutting metal, or a needle gun for cleaning contoured surfaces. Removes rust or paint and de-slags metal surfaces. Lever throttle offers easy, accurate control of chiseling action. Used for scaling in assembly shops, steel mills and foundries. Can also be used to remove caulking. **Model MP-25 Scaling Hammer available.**

**2527NS-ASM Needle Attachment**

**Takes style 100 - 1/2" quarter octagon chisel.**

- **Bore:** 1"  
- **Length:** 16-3/8"  
- **Stroke:** 7/8"  
- **Weight:** 5.75 lbs.  
- **Blows Per Minute:** 4000  
- **Air Inlet Thread:** 1/4"  
- **Rec’d Hose Size:** 1/4"  
- **Avg. Air Consumption:** 4 cfm

### Nitto Kohki Model 3M19-BC

**Needle Scaler**

Three types of needles including pointed tip, chisel tip, and flat tip are available. Designed for scaling, removing welding slag, and barnacles. Ideal for heavy paint removal. Needles conform to any surface contour.

- **3M19-STAINLESS**  
- **3M19-BC**

### Replacement Needle Sets

Three types of needles including pointed tip, chisel tip, and flat tip are available. Designed for scaling, removing welding slag, and barnacles. Ideal for heavy paint removal. Needles conform to any surface contour.

**3MM19-STAINLESS**  
**3MM19-BC**

### Michigan Pneumatic Model MP-25NS

**Needle Scaler**

Very powerful for its size. Ideal for use as a chisel gun for cutting metal, or a needle gun for cleaning contoured surfaces. Removes rust or paint and de-slags metal surfaces. Lever throttle offers easy, accurate control of chiseling action. Used for scaling in assembly shops, steel mills and foundries. Can also be used to remove caulking. **Model MP-25 Scaling Hammer available.**

**2527NS-ASM Needle Attachment**

**Takes style 100 - 1/2" quarter octagon chisel.**

- **Bore:** 1"  
- **Length:** 16-3/8"  
- **Stroke:** 7/8"  
- **Weight:** 5.75 lbs.  
- **Blows Per Minute:** 4000  
- **Air Inlet Thread:** 1/4"  
- **Rec’d Hose Size:** 1/4"  
- **Avg. Air Consumption:** 4 cfm

**Takes style 100 - 1/2" quarter octagon chisel.**

- **Bore:** 1"  
- **Length:** 16-3/8"  
- **Stroke:** 7/8"  
- **Weight:** 5.75 lbs.  
- **Blows Per Minute:** 4000  
- **Air Inlet Thread:** 1/4"  
- **Rec’d Hose Size:** 1/4"  
- **Avg. Air Consumption:** 4 cfm

**Takes style 100 - 1/2" quarter octagon chisel.**

- **Bore:** 1"  
- **Length:** 16-3/8"  
- **Stroke:** 7/8"  
- **Weight:** 5.75 lbs.  
- **Blows Per Minute:** 4000  
- **Air Inlet Thread:** 1/4"  
- **Rec’d Hose Size:** 1/4"  
- **Avg. Air Consumption:** 4 cfm

See page 119 for scaler chisels.
Needle Scalers

Nitto Kohki  Model JC-16

Needle Scaler

Used for removing rust, cleaning metals, peening welded joints and cleaning hardened concrete from construction equipment. Tool includes two sets of 2mm flat needles.

<table>
<thead>
<tr>
<th>Replacement Parts</th>
<th>Description</th>
<th>Code 1</th>
<th>Code 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>00A291-29</td>
<td>2mm Needle Set (29 pc.)</td>
<td></td>
<td>00A290</td>
</tr>
<tr>
<td>00A288</td>
<td>Piston</td>
<td></td>
<td>00A289</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piston Diameter</td>
<td>5/8&quot;</td>
</tr>
<tr>
<td>Stroke</td>
<td>0.86&quot;</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>4000</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>11&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>3.1 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>3.5 cfm</td>
</tr>
</tbody>
</table>

Nitto Kohki  Model JEX-24

Needle Scaler

Versatile design for working in any confined space. Ideal for de-slagging, removing rust, paint or scale from irregular or curved surfaces. Tool includes one set of 3mm flat needles.

<table>
<thead>
<tr>
<th>Replacement Parts</th>
<th>Description</th>
<th>Code 1</th>
<th>Code 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>00A342-53</td>
<td>2mm Needle Set (53 pc.)</td>
<td></td>
<td>02A244</td>
</tr>
<tr>
<td>00A341-23</td>
<td>3mm Needle Set (23 pc.)</td>
<td></td>
<td>02A245</td>
</tr>
<tr>
<td>02A242</td>
<td>Piston</td>
<td></td>
<td>02A243</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piston Diameter</td>
<td>15/16&quot;</td>
</tr>
<tr>
<td>Stroke</td>
<td>1.1&quot;</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>4000</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>13-3/4&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>6 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>7.8 cfm</td>
</tr>
</tbody>
</table>

Nitto Kohki  Model JEX-28

Needle Scaler

Cleans and descales jobs quickly. Gets deep into corners, uneven surfaces and curves. Tool includes 2 sets of 3mm flat needles and 2 sets of 4mm point needles with needle supporters for each size.

<table>
<thead>
<tr>
<th>Replacement Parts</th>
<th>Description</th>
<th>Code 1</th>
<th>Code 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>00A342-66</td>
<td>2mm Needle Set (66 pc.)</td>
<td></td>
<td>01A499</td>
</tr>
<tr>
<td>00A341-28</td>
<td>3mm Needle Set (28 pc.)</td>
<td></td>
<td>01A461</td>
</tr>
<tr>
<td>00A402-14</td>
<td>4mm Needle Set (14 pc.)</td>
<td></td>
<td>01A462</td>
</tr>
<tr>
<td>00A395</td>
<td>Piston</td>
<td></td>
<td>00A399</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piston Diameter</td>
<td>1-3/32&quot;</td>
</tr>
<tr>
<td>Stroke</td>
<td>1.18&quot;</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>4500</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>14-3/4&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>7.7 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>8.8 cfm</td>
</tr>
</tbody>
</table>

Nitto Kohki  Model EJC-32A

Electric Needle Scaler

Applications include removing weld sputters and surface processing on concrete and rocks. Also excellent for descaling paint or rust, removing sand from cast parts, and removing barnacles from ocean vessels. Features a slim barrel design, double insulated, and a free subhandle that positions to best fit the working situation. Also available in 220 volt AC, Model EJC-32A-220.

<table>
<thead>
<tr>
<th>Replacement Parts</th>
<th>Description</th>
<th>Code 1</th>
<th>Code 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>00A342-32</td>
<td>2mm Needle Set (32 pc.)</td>
<td>TP16475</td>
<td></td>
</tr>
<tr>
<td>00A341-15</td>
<td>3mm Needle Set (15 pc.)</td>
<td>TP16301</td>
<td></td>
</tr>
<tr>
<td>TP16339</td>
<td>Piston</td>
<td>TP16302</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Supply</td>
<td>AC 115V 60Hz</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>300W</td>
</tr>
<tr>
<td>Stroke Speed</td>
<td>3000/min.</td>
</tr>
<tr>
<td>Current</td>
<td>2.8A</td>
</tr>
<tr>
<td>Length</td>
<td>20-1/2&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>9.9 lbs.</td>
</tr>
</tbody>
</table>

See page 120 for additional needle styles.
### Nippon Pneumatic Model S-2L
**Scaling Hammer**

Strong and lightweight with a single reciprocating piston and grip ring throttle. Delivers rapid vibrating action to remove old paint, rust and scale from structural steel, boilers, tanks and castings. No chisels are required as the hammer piston itself acts as a chisel.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piston Diameter</td>
<td>1-3/16&quot;</td>
</tr>
<tr>
<td>Stroke</td>
<td>9/16&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>19-1/2&quot;</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>3500</td>
</tr>
<tr>
<td>Height</td>
<td>4&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>5.9 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>14.1 cfm</td>
</tr>
</tbody>
</table>

### Nippon Pneumatic Model S-2
**Scaling Hammer**

Single reciprocating piston delivers rapid blows to remove rust, scale, and old paint. Designed for structural steel and boiler industries.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piston Diameter</td>
<td>1-3/16&quot;</td>
</tr>
<tr>
<td>Stroke</td>
<td>9/16&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>19-5/16&quot;</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>3500</td>
</tr>
<tr>
<td>Height</td>
<td>4&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>4.6 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>14.1 cfm</td>
</tr>
</tbody>
</table>

### Michigan Pneumatic Model S1
**Scaling Hammer**

Designed for removing paint, rust and cement from steel. Compact design used in areas where the T3 will not fit.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piston Diameter</td>
<td>1&quot;</td>
</tr>
<tr>
<td>Stroke</td>
<td>13/16&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>9&quot;</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>4000</td>
</tr>
<tr>
<td>Height</td>
<td>5-7/8&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>4.5 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>9 cfm</td>
</tr>
</tbody>
</table>

### Michigan Pneumatic Model T3
**Lever Type Triplex Scaler**

Triple piston scaler designed for roughing cement and removing rust and paint. Features rugged steel body and lever throttle.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piston Diameter</td>
<td>1&quot;</td>
</tr>
<tr>
<td>Stroke</td>
<td>13/16&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>11&quot;</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>5200</td>
</tr>
<tr>
<td>Height</td>
<td>5-7/8&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>8.25 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>15 cfm</td>
</tr>
</tbody>
</table>
**Piston & Concrete Scalers**

**Michigan Pneumatic**  
**Model MP-40030**  
**Triplex Scaler**

Heavy-duty triple piston scaler designed to scale bridges, ship hulls and railroad cars. Can be mounted to a frame for multiple tool work. A dead handle is standard, and may be replaced with a pipe plug for scaling in close quarters.

- **H-31203**  
  Steel Tip Piston (each)
- **F24B00C550**  
  Carbide Tip Piston (each)

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piston Diameter</td>
<td>7/8&quot;</td>
</tr>
<tr>
<td>Stroke</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>13&quot;</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>7000</td>
</tr>
<tr>
<td>Height</td>
<td>3-3/8&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>7 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>19.4 cfm</td>
</tr>
</tbody>
</table>

** Michigan Pneumatic  
**Model MP-40030L**  
**Lever Type Triplex Scaler**

Designed for heavy-duty work such as scaling bridges, ship decks and hulls, railroad cars, structural steel pipe, and roughing concrete. Can be mounted to a frame for multiple tool work. A dead handle is standard, and may be replaced with a pipe plug for scaling in close quarters.

- **H-31203**  
  Steel Tip Piston (each)
- **F24B00C550**  
  Carbide Tip Piston (each)

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piston Diameter</td>
<td>7/8&quot;</td>
</tr>
<tr>
<td>Stroke</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Length</td>
<td>13-1/16&quot;</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>7000</td>
</tr>
<tr>
<td>Height</td>
<td>3-3/8&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>8.4 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>19.4 cfm</td>
</tr>
</tbody>
</table>

** Michigan Pneumatic  
**Model MP-NCS-9**  
**Lorry Type Concrete Scaler**

Features nine built-in reciprocating pistons. Carbide tipped pistons effectively remove laitance covering the surface of primary concrete. Simultaneously forms a desirable surface coarseness to facilitate spreading and adhering of the final layers. New device rolls easily on two wheels to cut time and cost. Scales concrete at a rate of 23 to 28 square yards per hour.

- **H-34203**  
  Carbide Tip Piston (each)

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piston Diameter</td>
<td>1-1/2&quot;</td>
</tr>
<tr>
<td>Number of Pistons</td>
<td>9</td>
</tr>
<tr>
<td>Rec'd Hose Size</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>4000</td>
</tr>
<tr>
<td>Height</td>
<td>17&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>198 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>30 cfm</td>
</tr>
</tbody>
</table>
### Michigan Pneumatic Model MP-00G-NN Sand Rammer
Lightweight, streamlined design for better control and reduced operator fatigue. Hard, rapid hitting performance ideal for refractory sand work. Additional rubber butts available in 1-3/4" or 2-1/2" diameter.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bore</td>
<td>11/16&quot;</td>
</tr>
<tr>
<td>Stroke</td>
<td>2&quot;</td>
</tr>
<tr>
<td>Taper</td>
<td>S</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>1600</td>
</tr>
<tr>
<td>Length</td>
<td>11-3/4&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>3.75 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Butt Diameter</td>
<td>1-3/4&quot; Rubber</td>
</tr>
</tbody>
</table>

### Michigan Pneumatic Model MP-0B Sand Rammer
Lightweight, rugged construction delivers fast hitting performance. Lower operator fatigue. Additional rubber butts available in 1-3/4" to 3-1/4" diameter.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bore</td>
<td>1&quot;</td>
</tr>
<tr>
<td>Stroke</td>
<td>2&quot;</td>
</tr>
<tr>
<td>Taper</td>
<td>802</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>2500</td>
</tr>
<tr>
<td>Length</td>
<td>16-1/2&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>6.65 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Butt Diameter</td>
<td>2-1/2&quot; Rubber</td>
</tr>
</tbody>
</table>

### Nippon Pneumatic Model B-00A Sand Rammer
Improved sand rammer delivers fast, powerful blows with minimal shock. New throttle lever design provides greater ease of handling for ramming small and medium flasks on jobs molded on the bench. Ideal for the core room. Also used for light backfill tamping. Additional rubber butts available in 1-3/4" to 3-1/4" diameter.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bore</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>Stroke</td>
<td>2-3/8&quot;</td>
</tr>
<tr>
<td>Taper</td>
<td>S</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>1600</td>
</tr>
<tr>
<td>Length</td>
<td>14&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>4.5 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Butt Diameter</td>
<td>1-5/8&quot; Rubber</td>
</tr>
</tbody>
</table>

### Nippon Pneumatic Model B-0A Sand Rammer
Improved sand rammer delivers fast, powerful blows for ramming small, medium and large flasks on the bench or floor. New throttle lever design provides greater ease of handling with reduced operator fatigue. Additional rubber butts available in 2-1/2" to 4" diameters.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bore</td>
<td>7/8&quot;</td>
</tr>
<tr>
<td>Stroke</td>
<td>2-3/4&quot;</td>
</tr>
<tr>
<td>Taper</td>
<td>M</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>750</td>
</tr>
<tr>
<td>Length</td>
<td>13-9/16&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>7 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Butt Diameter</td>
<td>2&quot; Rubber</td>
</tr>
</tbody>
</table>

### Nippon Pneumatic Model B-1A Sand Rammer
Fast, hard hitting design to deliver maximum power for smooth, efficient work. Lightweight, improved construction provides ease of operation and control. Great for heavy tamping, ramming fire clay and ideal for furnace work. Additional rubber butts available in 2-1/2" to 4" diameters.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bore</td>
<td>1&quot;</td>
</tr>
<tr>
<td>Stroke</td>
<td>4-1/2&quot;</td>
</tr>
<tr>
<td>Taper</td>
<td>ML</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>850</td>
</tr>
<tr>
<td>Length</td>
<td>19-1/8&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>12.5 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Butt Diameter</td>
<td>2-1/2&quot; Rubber</td>
</tr>
</tbody>
</table>

See page 128 for sand rammer accessories.
Bench Type Sand Rammers

Michigan Pneumatic  Model MP-BD2BA

Sand Rammer

Most popular bench rammer manufactured. Power-to-weight ratio exceeds all others in its class. Identical to the original Master Power and Black & Decker tools. Additional rubber butts available in 2-1/2" or 3-1/4" diameter.

<table>
<thead>
<tr>
<th>Bore</th>
<th>Stroke</th>
<th>Taper</th>
<th>Blows Per Minute</th>
<th>Length</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&quot;</td>
<td>2-1/2&quot;</td>
<td>802</td>
<td>1725</td>
<td>20-1/4&quot;</td>
<td>10 lbs</td>
</tr>
</tbody>
</table>

Michigan Pneumatic  Model MP-BD1BA

Sand Rammer

Ideal for use where more compacting force and reliability are a must. Manufactured using the highest quality steel and materials to ensure long life with minimal repairs. Additional rubber butts available in 2-1/2" or 3-1/4" diameter. Model MP-BD1BAFR with flat rod piston available.

<table>
<thead>
<tr>
<th>Bore</th>
<th>Stroke</th>
<th>Taper</th>
<th>Blows Per Minute</th>
<th>Length</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&quot;</td>
<td>2-1/2&quot;</td>
<td>802</td>
<td>1240</td>
<td>16-1/2&quot;</td>
<td>8.5 lbs</td>
</tr>
</tbody>
</table>

Michigan Pneumatic  Model MP-130

Sand Rammer

Lightweight for compacting sand molds in foundries. Unique double-action seal protects the tool from dirt and other contaminants for longer tool life. Model MP-130FR with flat rod piston available. Additional rubber butts available in 1-3/4" or 3-1/4".

<table>
<thead>
<tr>
<th>Bore</th>
<th>Stroke</th>
<th>Taper</th>
<th>Blows Per Minute</th>
<th>Length</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&quot;</td>
<td>2-1/2&quot;</td>
<td>801</td>
<td>870</td>
<td>16-1/2&quot;</td>
<td>8.5 lbs</td>
</tr>
</tbody>
</table>

Michigan Pneumatic  Model MP-140

Sand Rammer

Unique double-action seal protects the tool from dirt and other contaminants for longer tool life. Model MP-150 floor type tamper also available. Additional rubber butts available in 2-1/2" or 4".

<table>
<thead>
<tr>
<th>Bore</th>
<th>Stroke</th>
<th>Taper</th>
<th>Blows Per Minute</th>
<th>Length</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1/8&quot;</td>
<td>4&quot;</td>
<td>801</td>
<td>730</td>
<td>11-1/2&quot;</td>
<td>11.25 lbs</td>
</tr>
</tbody>
</table>

Michigan Pneumatic  Model MP-B401MR

Corner Rammer

Strong and lightweight with a single reciprocating piston and grip ring throttle. Delivers a rapid compacting action which effectively rams refractory material and sand in hard to reach areas.

<table>
<thead>
<tr>
<th>Bore</th>
<th>Stroke</th>
<th>Taper</th>
<th>Blows Per Minute</th>
<th>Length</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&quot;</td>
<td>9/16&quot;</td>
<td>802</td>
<td>8000</td>
<td>19-1/4&quot;</td>
<td>4.6 lbs</td>
</tr>
</tbody>
</table>

See page 128 for sand rammer accessories.
**Floor Type Tampers**

**Michigan Pneumatic Model MP-BD2BA-LR**

**Sand Rammer/Tamper**

Popular rammer with power-to-weight ratio exceeding all others in its class. Identical to the original Master Power and Black & Decker tools. Additional rubber butts available in 3-1/4” or 4” diameter.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bore</td>
<td>1”</td>
</tr>
<tr>
<td>Stroke</td>
<td>2-1/2”</td>
</tr>
<tr>
<td>Taper</td>
<td>802</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>1725</td>
</tr>
<tr>
<td>Length</td>
<td>42-5/16”</td>
</tr>
<tr>
<td>Weight</td>
<td>16.25 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/2”</td>
</tr>
<tr>
<td>Butt Diameter</td>
<td>2-1/2” Rubber</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic Model MP-BD1BA-LR**

**Sand Rammer/Tamper**

Ideal for use where more compacting force and reliability are a must. Manufactured using the highest quality steel and materials to ensure long life with minimal repairs. Additional rubber butts available in 3-1/4” or 4” diameter. Model MP-BD1BAFR-LR with flat rod piston available.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bore</td>
<td>1”</td>
</tr>
<tr>
<td>Stroke</td>
<td>4”</td>
</tr>
<tr>
<td>Taper</td>
<td>802</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>1240</td>
</tr>
<tr>
<td>Length</td>
<td>41-3/8”</td>
</tr>
<tr>
<td>Weight</td>
<td>18.1 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/2”</td>
</tr>
<tr>
<td>Butt Diameter</td>
<td>2-1/2” Rubber</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic Model MP-241A1M**

**Sand Rammer/Tamper**

Easy to hold from a standing position. Perfect for compacting large molds. MP-241A1MFR with flat rod piston available.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bore</td>
<td>15/16”</td>
</tr>
<tr>
<td>Stroke</td>
<td>4”</td>
</tr>
<tr>
<td>Taper</td>
<td>803</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>1590</td>
</tr>
<tr>
<td>Length</td>
<td>52-1/2”</td>
</tr>
<tr>
<td>Weight</td>
<td>26.0 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/2”</td>
</tr>
<tr>
<td>Butt Diameter</td>
<td>3-1/4” Rubber</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic Model MP-341A1M**

**Sand Rammer/Tamper**

Favorite among municipal utility crews. Proven tool for backfilling around foundations. Optional 3-1/2” steel butts available. Model MP-441 also available.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bore</td>
<td>1-5/8”</td>
</tr>
<tr>
<td>Stroke</td>
<td>4”</td>
</tr>
<tr>
<td>Taper</td>
<td>T</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>1550</td>
</tr>
<tr>
<td>Length</td>
<td>52-3/4”</td>
</tr>
<tr>
<td>Weight</td>
<td>35.0 lbs.</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>1/2”</td>
</tr>
<tr>
<td>Butt Diameter</td>
<td>6” Steel</td>
</tr>
</tbody>
</table>

See page 128 for sand rammer accessories.
**Floor Type Tampers**

**Nippon Pneumatic  Model F-1**

**Sand Rammer/Tamper**

Developed to bridge the gap between bench rammers and floor rammers. Ideal for compacting sand in molds that cannot be accessed with a bench style rammer. **Additional rubber butts available in 2-1/2" to 5" diameters.**

<table>
<thead>
<tr>
<th>Bore</th>
<th>Stroke</th>
<th>Taper</th>
<th>Blows Per Minute</th>
<th>Length</th>
<th>Weight</th>
<th>Air Inlet Thread</th>
<th>Butt Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&quot;</td>
<td>4-5/16&quot;</td>
<td>ML</td>
<td>750</td>
<td>43-3/16&quot;</td>
<td>15.00 lbs.</td>
<td>1/2&quot;</td>
<td>2-1/2&quot; Rubber</td>
</tr>
</tbody>
</table>

**Nippon Pneumatic  Model F-2**

**Sand Rammer/Tamper**

Designed with a new automatic valve which eliminates unnecessary maintenance normally encountered with sand and dirt abrasion. Piston is plated for long life. Ideal for backfill tamping between foundations and other job site obstructions. **Additional rubber butts available in 2-1/2" to 5" diameters.**

<table>
<thead>
<tr>
<th>Bore</th>
<th>Stroke</th>
<th>Taper</th>
<th>Blows Per Minute</th>
<th>Length</th>
<th>Weight</th>
<th>Air Inlet Thread</th>
<th>Butt Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1/4&quot;</td>
<td>4-23/32&quot;</td>
<td>L</td>
<td>800</td>
<td>44&quot;</td>
<td>20.75 lbs.</td>
<td>1/2&quot;</td>
<td>2-3/4&quot; Rubber</td>
</tr>
</tbody>
</table>

**Nippon Pneumatic  Model F-4**

**Sand Rammer/Tamper**

Delivers rapid, powerful blows for heavy-duty tamping. Designed to compact soil around foundations and backfill in trenches. Chrome plated piston rod resists wear caused by dirt and sand abrasion. Piston rod packing and adjustments can be performed on the job without the need of special tools. **Additional rubber butts available in 3-1/4" to 5" diameters.**

<table>
<thead>
<tr>
<th>Bore</th>
<th>Stroke</th>
<th>Taper</th>
<th>Blows Per Minute</th>
<th>Length</th>
<th>Weight</th>
<th>Air Inlet Thread</th>
<th>Butt Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-9/16&quot;</td>
<td>4-23/32&quot;</td>
<td>T</td>
<td>700</td>
<td>44&quot;</td>
<td>26.50 lbs.</td>
<td>1/2&quot;</td>
<td>6&quot; Steel</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic  Model MP-6T**

**Sand Rammer/Tamper**

Designed for operator comfort, maximum work output and minimum maintenance. Delivers rapid, powerful blows for compacting soil around foundations and backfilling trenches. **Pole butt and 3-1/2" steel butt available.**

<table>
<thead>
<tr>
<th>Bore</th>
<th>Stroke</th>
<th>Taper</th>
<th>Blows Per Minute</th>
<th>Length</th>
<th>Weight</th>
<th>Air Inlet Thread</th>
<th>Butt Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1/2&quot;</td>
<td>5-1/2&quot;</td>
<td>T</td>
<td>750</td>
<td>49&quot;</td>
<td>40.50 lbs.</td>
<td>1/2&quot;</td>
<td>6&quot; Steel</td>
</tr>
</tbody>
</table>

See page 128 for sand rammer accessories.
**Bench Rammer Accessories**

### Rubber Rammer Butts

Made of the finest neoprene to ensure uniformity of bonding. Highly resistant to oil and wear. *Please specify tool model number and size of butt when ordering. Solid aluminum, steel and rectangular butts available.*

<table>
<thead>
<tr>
<th>Tool Model No.</th>
<th>Butt Model No.</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-00G-NN</td>
<td>F40010D700</td>
<td>1-1/2”</td>
</tr>
<tr>
<td>MP-20BA</td>
<td>201-S</td>
<td>1-3/4”</td>
</tr>
<tr>
<td>B-00A</td>
<td>202-S</td>
<td>2-1/2”</td>
</tr>
<tr>
<td></td>
<td>203-S</td>
<td>3-1/4”</td>
</tr>
<tr>
<td>MP-130</td>
<td>201-801</td>
<td>1-3/4”</td>
</tr>
<tr>
<td>MP-140</td>
<td>202-801</td>
<td>2-1/2”</td>
</tr>
<tr>
<td></td>
<td>203-801</td>
<td>3-1/4”</td>
</tr>
<tr>
<td>MP-150</td>
<td>202-801</td>
<td>2-1/2”</td>
</tr>
<tr>
<td></td>
<td>203-801</td>
<td>3-1/4”</td>
</tr>
<tr>
<td></td>
<td>204-801</td>
<td>4”</td>
</tr>
<tr>
<td></td>
<td>205-801</td>
<td>5”</td>
</tr>
<tr>
<td>MP-0B</td>
<td>202-802</td>
<td>2-1/2”</td>
</tr>
<tr>
<td>MP-BD2BA</td>
<td>203-802</td>
<td>3-1/4”</td>
</tr>
<tr>
<td>MP-BD2BA-LR</td>
<td>203-802</td>
<td>3-1/4”</td>
</tr>
<tr>
<td>MP-BD1BA</td>
<td>203-802</td>
<td>3-1/4”</td>
</tr>
<tr>
<td>MP-BD1BA-LR</td>
<td>203-802</td>
<td>3-1/4”</td>
</tr>
<tr>
<td>MP-241A1M</td>
<td>203-803</td>
<td>3-1/4”</td>
</tr>
<tr>
<td></td>
<td>204-803</td>
<td>4”</td>
</tr>
<tr>
<td></td>
<td>205-803</td>
<td>5”</td>
</tr>
</tbody>
</table>

### Steel Rammer Butts

![Steel Rammer Butts](image)

<table>
<thead>
<tr>
<th>Tool Model No.</th>
<th>Butt Model No.</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-00G, MP-20BA &amp; B-00A</td>
<td>RG-01420</td>
<td>2-1/2”</td>
</tr>
<tr>
<td>MP-10BA, B-0A &amp; F-0</td>
<td>RG-03420</td>
<td>2-1/2”</td>
</tr>
<tr>
<td>MP-14, B-1A &amp; F-1</td>
<td>RG-04420</td>
<td>2-1/2”</td>
</tr>
<tr>
<td>MP-1F &amp; F-2</td>
<td>RG-06420</td>
<td>2-3/4”</td>
</tr>
<tr>
<td>MP-BD2BA, MP-BD2BA-LR, MP-BD1BA &amp; MP-BD1BA-LR</td>
<td>TX-00202</td>
<td>2-1/2” w/bolt hole</td>
</tr>
<tr>
<td>MP-6T &amp; MP-341A1M</td>
<td>73206</td>
<td>6” w/bolt hole</td>
</tr>
<tr>
<td></td>
<td>34SR-ST183</td>
<td>3-3/8”</td>
</tr>
<tr>
<td></td>
<td>5.250-M-78</td>
<td>5-1/4” U-Shape</td>
</tr>
<tr>
<td>MP-F4 &amp; F-4</td>
<td>RG-07420</td>
<td>6”</td>
</tr>
<tr>
<td>MP-F4 &amp; F-4</td>
<td>RG-07420-SP</td>
<td>6” w/bolt hole</td>
</tr>
<tr>
<td></td>
<td>F54A00D210</td>
<td>3-11/32”</td>
</tr>
</tbody>
</table>

### 6” Steel Butts

Fits: Thor 6T & 66T, IR 34 & 341, Jet 06 & APT-131 Backfill Tamperers

**Model 73026**

6” Steel Butt

**Model 34SR-85**

Bolt

**Model 34SR-85**

Bolt

Fits: MP-F4, MP-B66 and most backfill tampers (does not accommodate butt locking screw)

Fits: IR-341, IR-441, APT-131, Thor & CP

**Model 241SR-A160-E**

Large Volume Throttle/Live Handle

Fits: IR-341, IR-441, APT-131, Thor & CP

**Model 241SR-A160-STEEL**

Large Volume Throttle/Live Handle

**Fits: MP-1F, MP-F4 & MP-114**

**Model 033**

Throttle/Live Handle

**Fits: MP-1F, MP-F4 & MP-114**

**Model 24SR-R160**

Throttle/Live Handle

**Fits: IR-341, IR-441, APT-131, Thor & CP**

**Model 241SR-A160-STEEL**

Large Volume Throttle/Live Handle

**Fits: MP-1F, MP-F4 & MP-114**

**Model 24SR-R160**

Throttle/Live Handle
Clay Diggers & Demolition Tools

20 lb. & 30 lb. Class Clay Digger

Versatile, powerful tools designed for digging clay, cutting hard pan or loosening compacted or frozen ground. Ideal for trench digging and demolition work, excavating, cutting brick or asphalt and breaking light concrete. Latch-type retainer models allow operator to change chisels easily. Available in a variety of shanks and sizes. Please specify. Optional T-handle 0448052 available. Parts for MP-733 models are interchangeable with Ingersoll-Rand Model 73 and 93 diggers. Parts for MP-955 models are interchangeable with Ingersoll-Rand Model 75 and 95 diggers.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Shank Type</th>
<th>Piston Stroke</th>
<th>Piston Diameter</th>
<th>Blows Per Minute</th>
<th>Retainer Type</th>
<th>Length</th>
<th>Weight</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-733-34</td>
<td>3/4&quot; Square x 2-3/4&quot;</td>
<td>3/4&quot; Hex x 3-1/4&quot;</td>
<td>2-1/2&quot;</td>
<td>1-11/16&quot;</td>
<td>1500</td>
<td>Sleeve</td>
<td>19-1/4&quot;</td>
<td>21.90 lbs.</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>MP-733-78</td>
<td>3/4&quot; Square x 2-3/4&quot;</td>
<td>3/4&quot; Hex x 3-1/4&quot;</td>
<td>2-1/2&quot;</td>
<td>1-11/16&quot;</td>
<td>1500</td>
<td>Sleeve</td>
<td>19-1/4&quot;</td>
<td>21.90 lbs.</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>MP-733-LAT95-34</td>
<td>3/4&quot; Square x 2-3/4&quot;</td>
<td>3/4&quot; Hex x 3-1/4&quot;</td>
<td>2-1/2&quot;</td>
<td>1-11/16&quot;</td>
<td>1500</td>
<td>Sleeve</td>
<td>19-1/4&quot;</td>
<td>21.90 lbs.</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>MP-733-LAT95-78</td>
<td>3/4&quot; Square x 2-3/4&quot;</td>
<td>3/4&quot; Hex x 3-1/4&quot;</td>
<td>2-1/2&quot;</td>
<td>1-11/16&quot;</td>
<td>1500</td>
<td>Sleeve</td>
<td>19-1/4&quot;</td>
<td>21.90 lbs.</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>MP-955-34</td>
<td>3/4&quot; Square x 2-3/4&quot;</td>
<td>3/4&quot; Hex x 3-1/4&quot;</td>
<td>4-3/8&quot;</td>
<td>1-11/16&quot;</td>
<td>1200</td>
<td>Sleeve</td>
<td>21-3/4&quot;</td>
<td>29.75 lbs.</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>MP-955-78</td>
<td>3/4&quot; Square x 2-3/4&quot;</td>
<td>3/4&quot; Hex x 3-1/4&quot;</td>
<td>4-3/8&quot;</td>
<td>1-11/16&quot;</td>
<td>1200</td>
<td>Sleeve</td>
<td>21-3/4&quot;</td>
<td>29.75 lbs.</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>MP-955-LAT95-34</td>
<td>3/4&quot; Square x 2-3/4&quot;</td>
<td>3/4&quot; Hex x 3-1/4&quot;</td>
<td>4-3/8&quot;</td>
<td>1-11/16&quot;</td>
<td>1200</td>
<td>Sleeve</td>
<td>21-3/4&quot;</td>
<td>29.75 lbs.</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>MP-955-LAT95-78</td>
<td>3/4&quot; Square x 2-3/4&quot;</td>
<td>3/4&quot; Hex x 3-1/4&quot;</td>
<td>4-3/8&quot;</td>
<td>1-11/16&quot;</td>
<td>1200</td>
<td>Sleeve</td>
<td>21-3/4&quot;</td>
<td>29.75 lbs.</td>
<td>3/8&quot;</td>
</tr>
</tbody>
</table>

30 lb. Class Clay Digger

Heavy-duty machine for all construction applications, including digging clay, gravel, hard pan and frozen ground. Ideal for excavating in tunnels and other restricted quarters. Exceptional power for light demolition, wall breaking and stake driving. Available in 7/8" hex x 3-1/4" or 1" hex x 4-1/4". Please specify. Parts are interchangeable with Thor Model 18 digger.

Piston Stroke .................... 3-3/8"  | Length .................................. 22"
Piston Diameter ................ 1-3/4"  | Weight .................................. 30 lbs.
Blows Per Minute ............... 1550  | Air Inlet Thread ........................ 3/4"
Rec’d Hose Size ................. 1/2"  | Retainer Type ........................ Latch

See pages 132-133 for clay digger chisels.
Pavement Breakers

Nippon Pneumatic Models cB-152 & cB-153
40 lb. Class Pavement Breakers

Lightweight, compact, hard hitting tools excellent for light and medium demolition work. Reduced recoil and shortened length make these breakers easy to operate. Ideal for bridge deck work. Available in 7/8" hex x 3-1/4" or 1" hex x 4-1/4" shank size. Please specify.

<table>
<thead>
<tr>
<th>Model</th>
<th>CB-152</th>
<th>CB-153</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shank Size</td>
<td>7/8&quot; Hex x 3-1/4&quot;</td>
<td>1&quot; Hex x 4-1/4&quot;</td>
</tr>
<tr>
<td>Piston Stroke</td>
<td>1-3/8&quot;</td>
<td>1-3/8&quot;</td>
</tr>
<tr>
<td>Piston Diameter</td>
<td>1-1/2&quot;</td>
<td>1-1/2&quot;</td>
</tr>
<tr>
<td>Blows Per Minute</td>
<td>1300</td>
<td>1300</td>
</tr>
<tr>
<td>Length</td>
<td>21-1/8&quot;</td>
<td>21-13/16&quot;</td>
</tr>
<tr>
<td>Weight</td>
<td>38 lbs.</td>
<td>38 lbs.</td>
</tr>
<tr>
<td>Rec’d Hose Size</td>
<td>3/4&quot;</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>Air Inlet Thread</td>
<td>3/4&quot;</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>Avg. Air Consumption</td>
<td>50 cfm</td>
<td>50 cfm</td>
</tr>
</tbody>
</table>

Hard hitting, heavy weight breaker features smooth operation for general use breaking asphalt, concrete and brick. Features extra-sturdy four bolt head-to-cylinder construction, full control throttle, efficient valve chest for low maintenance operation, drop-forged cylinder, replaceable front end bushing, chisel retainer latch and rubber hand grips.
Hard hitting 30 and 60 lb. class tools for light and medium demolition work. Rugged, lightweight design is ideal for plant maintenance, breaking concrete floors or frozen ground and masonry walls. Features rubber hand grips for improved operator comfort and a swivel hose connection. Heavy-duty 90 lb. class designed for ripping out reinforced concrete and tearing out streets. Features durable, rugged pistons for extremely versatile demolition purposes.

### Thor Style Pavement Breakers

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Shank Size</th>
<th>Piston Stroke</th>
<th>Piston Diameter</th>
<th>Blows Per Minute</th>
<th>Length</th>
<th>Weight</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-30-78</td>
<td>7/8&quot; Hex x 3-1/4&quot;</td>
<td>3-3/8&quot;</td>
<td>1-3/4&quot;</td>
<td>1550</td>
<td>22-1/2&quot;</td>
<td>33 lbs.</td>
<td>1/2&quot;</td>
<td>3/8&quot;</td>
<td>39 cfm</td>
</tr>
<tr>
<td>MP-30-1</td>
<td>1&quot; Hex x 4-1/4&quot;</td>
<td>3-3/8&quot;</td>
<td>1-3/4&quot;</td>
<td>1550</td>
<td>22-1/2&quot;</td>
<td>33 lbs.</td>
<td>1/2&quot;</td>
<td>3/8&quot;</td>
<td>39 cfm</td>
</tr>
<tr>
<td>MP-TPB60-118</td>
<td>1-1/8&quot; Hex x 6&quot;</td>
<td>5&quot;</td>
<td>2-1/4&quot;</td>
<td>1400</td>
<td>25-3/8&quot;</td>
<td>66 lbs.</td>
<td>3/4&quot;</td>
<td>3/4&quot;</td>
<td>58 cfm</td>
</tr>
<tr>
<td>MP-TPB60-114</td>
<td>1-1/4&quot; Hex x 6&quot;</td>
<td>6-1/2&quot;</td>
<td>2-5/8&quot;</td>
<td>1200</td>
<td>28-3/4&quot;</td>
<td>91 lbs.</td>
<td>3/4&quot;</td>
<td>3/4&quot;</td>
<td>75 cfm</td>
</tr>
<tr>
<td>MP-TPB90-118</td>
<td>1-1/4&quot; Hex x 6&quot;</td>
<td>6-1/2&quot;</td>
<td>2-5/8&quot;</td>
<td>1200</td>
<td>28-3/4&quot;</td>
<td>91 lbs.</td>
<td>3/4&quot;</td>
<td>3/4&quot;</td>
<td>75 cfm</td>
</tr>
<tr>
<td>MP-TPB90-114</td>
<td>1-1/4&quot; Hex x 6&quot;</td>
<td>6-1/2&quot;</td>
<td>2-5/8&quot;</td>
<td>1200</td>
<td>28-3/4&quot;</td>
<td>91 lbs.</td>
<td>3/4&quot;</td>
<td>3/4&quot;</td>
<td>75 cfm</td>
</tr>
</tbody>
</table>

### Model Interchange

<table>
<thead>
<tr>
<th>Thor Power Tool</th>
<th>Michigan Pneumatic</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>MP-30-78/MP-30-1</td>
</tr>
<tr>
<td>23</td>
<td>MP-TPB60-118/MP-TPB60-114</td>
</tr>
<tr>
<td>125</td>
<td>MP-TPB90-118/MP-TPB90-114</td>
</tr>
</tbody>
</table>

### Gardner-Denver Model B37

Michigan Pneumatic Models MP-90-118 & MP-90-114

Rugged designs ideal for plant maintenance. Model B37 ideal for bridge deck work. MP-90 series useful for reinforced concrete. Most of the MP-90 series parts interchangeable with Ingersoll-Rand Model PB8A paving breaker.
## Pavement Breaker/Clay Digger Tools & Accessories

### Pavement Breaker Kits

**Narrow Chisel & Moil Point - Standard**

<table>
<thead>
<tr>
<th>Shank Size</th>
<th>Length Under Collar</th>
<th>Chisel No.</th>
<th>Point No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/8&quot; x 3-1/4&quot;</td>
<td>14&quot; 18&quot; 24&quot; 36&quot;</td>
<td>923NC 924 924-2 924-3</td>
<td>1011 1012 1012-2 1012-3</td>
</tr>
<tr>
<td>1&quot; x 4-1/4&quot;</td>
<td>14&quot; 18&quot; 24&quot; 36&quot;</td>
<td>925 926 926-2 926-3</td>
<td>1013 1014 1014-2 1014-3</td>
</tr>
<tr>
<td>1-1/8&quot; x 6&quot;</td>
<td>14&quot; 18&quot; 24&quot; 36&quot;</td>
<td>1030 1031 1031-2 1031-3</td>
<td>1019 1020 1020-2 1020-3</td>
</tr>
<tr>
<td>1-1/4&quot; x 6&quot;</td>
<td>14&quot; 18&quot; 24&quot; 36&quot;</td>
<td>1034 1035 1035-2 1035-3</td>
<td>1023 1024 1024-2 1024-3</td>
</tr>
</tbody>
</table>

**Narrow Chisel & Moil Point - Super Duty**

<table>
<thead>
<tr>
<th>Shank Size</th>
<th>Length Under Collar</th>
<th>Chisel No.</th>
<th>Point No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4&quot; sq. x 2-3/4&quot;</td>
<td>14&quot; 18&quot;</td>
<td>1087C 1088C</td>
<td>1087P 1088P</td>
</tr>
<tr>
<td>7/8&quot; hex x 3-1/4&quot;</td>
<td>14&quot; 18&quot;</td>
<td>923R 924R</td>
<td>1011R 1012R</td>
</tr>
<tr>
<td>1&quot; hex x 4-1/4&quot;</td>
<td>14&quot; 18&quot;</td>
<td>925 926</td>
<td>1013 1014</td>
</tr>
<tr>
<td>1&quot; hex x 6&quot;</td>
<td>14&quot; 18&quot;</td>
<td>1030 1031</td>
<td>1019 1020</td>
</tr>
<tr>
<td>1&quot; hex x 6&quot;</td>
<td>14&quot; 18&quot;</td>
<td>1034 1035</td>
<td>1023 1024</td>
</tr>
</tbody>
</table>

### Pavement Breaker Mufflers

**3" Chisel**

<table>
<thead>
<tr>
<th>Shank Size</th>
<th>Length Under Collar</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/8&quot; x 3-1/4&quot; (2-1/2&quot; blade)</td>
<td>14&quot; 18&quot; 24&quot; 36&quot;</td>
<td>934 935 935-2 935-3</td>
</tr>
<tr>
<td>1&quot; x 4-1/4&quot;</td>
<td>14&quot; 18&quot; 24&quot; 36&quot;</td>
<td>936 937 937-2 937-3</td>
</tr>
<tr>
<td>1-1/8&quot; x 6&quot;</td>
<td>14&quot; 18&quot; 24&quot; 36&quot;</td>
<td>1040 1041 1041-2 1041-3</td>
</tr>
<tr>
<td>1-1/4&quot; x 6&quot;</td>
<td>14&quot; 18&quot; 24&quot; 36&quot;</td>
<td>1042 1043 1043-2 1043-3</td>
</tr>
</tbody>
</table>

## Additional Kits for Other Manufacturer Models Available

- **Fits Tool Model No.** Latch Kit No. Side Rod Kit No.
  - MP-30 MP-TC18 LKIT-APT117 -
  - MP-90 LKIT-IRPB8 SRKIT-IRPB6
  - MP-17 LKIT-CP1210 SRKIT-CP1210
  - MP-23118 MP-23114 LKIT-CP1230 SRKIT-CP1230
  - MP-91118 MP-91114 LKIT-CP1240 SRKIT-CP1240
  - MP-TPB60 LKIT-APT190 SRKIT-APT160
  - MP-TPB90 LKIT-IR159 SRKIT-IRPB90
  - MP-955 (Old) MP-733 (Old) LKIT-IR159 -
  - MP-733 (New) MP-955 (New) LKIT-IR93LA1 -

- **Fits Tool Model No.** Latch Kit No. Side Rod Kit No.
  - MP-TPB60-118/MP-TPB60-114 LKIT-APT117 -
  - MP-91118 MP-91114 LKIT-CP1240 SRKIT-CP1240
  - MP-TPB60 LKIT-APT190 SRKIT-APT160
  - MP-TPB90 LKIT-IR159 SRKIT-IRPB90
  - MP-955 (Old) MP-733 (Old) LKIT-IR159 -
  - MP-733 (New) MP-955 (New) LKIT-IR93LA1 -

**Fits Tool Model No.** Part No.
- MP-TPB60-118/MP-TPB60-114 6467 6052 83-AM F814928
- MP-TPB90-118/MP-TPB90-114 6467 6052 83-AM F814928
- CP-117 6467 6052 83-AM F814928
- MP-17 6467 6052 83-AM F814928
- MP-23118 / MP-23114 6467 6052 83-AM F814928
- MP-91118 / MP-91114 6467 6052 83-AM F814928

- Longer lengths available.
## Pavement Breaker & Clay Digger Tools

### Bushing Tool - 16 Teeth - 2" x 2" Face
<table>
<thead>
<tr>
<th>Shank Size</th>
<th>Length Under Collar</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4&quot; sq. x 2-3/4&quot;</td>
<td>9&quot;</td>
<td>851</td>
</tr>
<tr>
<td>7/8&quot; hex x 3-1/4&quot;</td>
<td>8&quot;</td>
<td>846</td>
</tr>
<tr>
<td>1&quot; hex x 4-1/4&quot;</td>
<td>8&quot;</td>
<td>847</td>
</tr>
<tr>
<td>1-1/8&quot; hex x 6&quot;</td>
<td>8&quot;</td>
<td>848</td>
</tr>
<tr>
<td>1-1/4&quot; hex x 6&quot;</td>
<td>8&quot;</td>
<td>849</td>
</tr>
</tbody>
</table>

### Form Pin Driver - 3/4" Depth x 1-1/4" Diameter
<table>
<thead>
<tr>
<th>Shank Size</th>
<th>Length Under Collar</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/8&quot; x 3-1/4&quot;</td>
<td>8&quot;</td>
<td>83-3</td>
</tr>
<tr>
<td>1&quot; x 4-1/4&quot;</td>
<td>8&quot;</td>
<td>B21991</td>
</tr>
<tr>
<td>1-1/8&quot; x 6&quot;</td>
<td>8&quot;</td>
<td>B31991</td>
</tr>
<tr>
<td>1-1/4&quot; x 6&quot;</td>
<td>8&quot;</td>
<td>B41991</td>
</tr>
</tbody>
</table>

### Detachable Shank - 1-5/8" Small Diameter
For Tamping Pads & Sheathing Driver Shoes
<table>
<thead>
<tr>
<th>Shank Size</th>
<th>Length Under Collar</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/8&quot; x 3-1/4&quot;</td>
<td>9&quot;</td>
<td>864DS</td>
</tr>
<tr>
<td>1&quot; x 4-1/4&quot;</td>
<td>9&quot;</td>
<td>865</td>
</tr>
<tr>
<td>1-1/8&quot; x 6&quot;</td>
<td>9&quot;</td>
<td>867DS</td>
</tr>
<tr>
<td>1-1/4&quot; x 6&quot;</td>
<td>9&quot;</td>
<td>868</td>
</tr>
</tbody>
</table>

### Tamping Pads
<table>
<thead>
<tr>
<th>Shank Size</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>6&quot; Square</td>
<td>968</td>
</tr>
<tr>
<td>7&quot; Round</td>
<td>965RP</td>
</tr>
<tr>
<td>8&quot; Square</td>
<td>968SP</td>
</tr>
</tbody>
</table>

### Asphaln Wedge - 3" Width x 6" Blade Length
<table>
<thead>
<tr>
<th>Shank Size</th>
<th>Length Under Collar</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&quot; x 4-1/4&quot;</td>
<td>12&quot;</td>
<td>942</td>
</tr>
<tr>
<td>1-1/8&quot; x 6&quot;</td>
<td>12&quot;</td>
<td>943</td>
</tr>
<tr>
<td>1-1/4&quot; x 6&quot;</td>
<td>12&quot;</td>
<td>1045</td>
</tr>
</tbody>
</table>

### Asphalt Wedge - 5" Width x 6" Blade Length
<table>
<thead>
<tr>
<th>Shank Size</th>
<th>Length Under Collar</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/8&quot; x 3-1/4&quot;</td>
<td>11&quot;</td>
<td>942</td>
</tr>
<tr>
<td>1&quot; x 4-1/4&quot;</td>
<td>12&quot;</td>
<td>943</td>
</tr>
<tr>
<td>1-1/8&quot; x 6&quot;</td>
<td>12&quot;</td>
<td>1045</td>
</tr>
<tr>
<td>1-1/4&quot; x 6&quot;</td>
<td>12&quot;</td>
<td>1046</td>
</tr>
</tbody>
</table>

### Digging Chisel - 3" Blade Width
<table>
<thead>
<tr>
<th>Shank Size</th>
<th>Length Under Collar</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&quot; x 4-1/4&quot;</td>
<td>16&quot;</td>
<td>946</td>
</tr>
<tr>
<td>1-1/8&quot; x 6&quot;</td>
<td>15-1/2&quot;</td>
<td>1048</td>
</tr>
<tr>
<td>1-1/4&quot; x 6&quot;</td>
<td>15-1/2&quot;</td>
<td>1049</td>
</tr>
</tbody>
</table>

### Asphalt Cutter - 5" Width x 6" Blade Length
<table>
<thead>
<tr>
<th>Shank Size</th>
<th>Length Under Collar</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/8&quot; x 3-1/4&quot;</td>
<td>11&quot;</td>
<td>942</td>
</tr>
<tr>
<td>1&quot; x 4-1/4&quot;</td>
<td>12&quot;</td>
<td>943</td>
</tr>
<tr>
<td>1-1/8&quot; x 6&quot;</td>
<td>12&quot;</td>
<td>1045</td>
</tr>
<tr>
<td>1-1/4&quot; x 6&quot;</td>
<td>12&quot;</td>
<td>1046</td>
</tr>
</tbody>
</table>

### Clay Spade - 5-1/2" Width x 8-1/2" Blade Length
<table>
<thead>
<tr>
<th>Shank Size</th>
<th>Length Under Collar</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4&quot; sq. x 2-3/4&quot;</td>
<td>16-1/2&quot;</td>
<td>1078</td>
</tr>
<tr>
<td>7/8&quot; hex x 3-1/4&quot;</td>
<td></td>
<td>982</td>
</tr>
<tr>
<td>1&quot; hex x 4-1/4&quot;</td>
<td></td>
<td>972</td>
</tr>
<tr>
<td>1-1/8&quot; hex x 6&quot;</td>
<td></td>
<td>1075</td>
</tr>
<tr>
<td>1-1/4&quot; hex x 6&quot;</td>
<td></td>
<td>1077</td>
</tr>
</tbody>
</table>

### Clay Spade - 5-1/2" Width x 8-1/2" Blade Length
<table>
<thead>
<tr>
<th>Shank Size</th>
<th>Length Under Collar</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4&quot; sq. x 2-3/4&quot;</td>
<td>16-1/2&quot;</td>
<td>1078</td>
</tr>
<tr>
<td>7/8&quot; hex x 3-1/4&quot;</td>
<td></td>
<td>982</td>
</tr>
<tr>
<td>1&quot; hex x 4-1/4&quot;</td>
<td></td>
<td>972</td>
</tr>
<tr>
<td>1-1/8&quot; hex x 6&quot;</td>
<td></td>
<td>1075</td>
</tr>
<tr>
<td>1-1/4&quot; hex x 6&quot;</td>
<td></td>
<td>1077</td>
</tr>
</tbody>
</table>

### Form Pin Driver - 3/4" Depth x 1-1/4" Diameter
<table>
<thead>
<tr>
<th>Shank Size</th>
<th>Length Under Collar</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/8&quot; x 3-1/4&quot;</td>
<td>8&quot;</td>
<td>83-3</td>
</tr>
<tr>
<td>1&quot; x 4-1/4&quot;</td>
<td>8&quot;</td>
<td>B21991</td>
</tr>
<tr>
<td>1-1/8&quot; x 6&quot;</td>
<td>8&quot;</td>
<td>B31991</td>
</tr>
<tr>
<td>1-1/4&quot; x 6&quot;</td>
<td>8&quot;</td>
<td>B41991</td>
</tr>
</tbody>
</table>

### Asphalt Wedge - 5" Width x 6" Blade Length
<table>
<thead>
<tr>
<th>Shank Size</th>
<th>Length Under Collar</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/8&quot; x 3-1/4&quot;</td>
<td>11&quot;</td>
<td>942</td>
</tr>
<tr>
<td>1&quot; x 4-1/4&quot;</td>
<td>12&quot;</td>
<td>943</td>
</tr>
<tr>
<td>1-1/8&quot; x 6&quot;</td>
<td>12&quot;</td>
<td>1045</td>
</tr>
<tr>
<td>1-1/4&quot; x 6&quot;</td>
<td>12&quot;</td>
<td>1046</td>
</tr>
</tbody>
</table>

### Asphalt Wedge - 5" Width x 6" Blade Length
<table>
<thead>
<tr>
<th>Shank Size</th>
<th>Length Under Collar</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/8&quot; x 3-1/4&quot;</td>
<td>11&quot;</td>
<td>942</td>
</tr>
<tr>
<td>1&quot; x 4-1/4&quot;</td>
<td>12&quot;</td>
<td>943</td>
</tr>
<tr>
<td>1-1/8&quot; x 6&quot;</td>
<td>12&quot;</td>
<td>1045</td>
</tr>
<tr>
<td>1-1/4&quot; x 6&quot;</td>
<td>12&quot;</td>
<td>1046</td>
</tr>
</tbody>
</table>

### Detachable Shank - 1-5/8" Small Diameter
For Tamping Pads & Sheathing Driver Shoes
<table>
<thead>
<tr>
<th>Shank Size</th>
<th>Length Under Collar</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/8&quot; x 3-1/4&quot;</td>
<td>9&quot;</td>
<td>864DS</td>
</tr>
<tr>
<td>1&quot; x 4-1/4&quot;</td>
<td>9&quot;</td>
<td>865</td>
</tr>
<tr>
<td>1-1/8&quot; x 6&quot;</td>
<td>9&quot;</td>
<td>867DS</td>
</tr>
<tr>
<td>1-1/4&quot; x 6&quot;</td>
<td>9&quot;</td>
<td>868</td>
</tr>
</tbody>
</table>

### Tamping Pads
<table>
<thead>
<tr>
<th>Shank Size</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>6&quot; Square</td>
<td>968</td>
</tr>
<tr>
<td>7&quot; Round</td>
<td>965RP</td>
</tr>
<tr>
<td>8&quot; Square</td>
<td>968SP</td>
</tr>
</tbody>
</table>

### Sheathing Driver Shoe
<table>
<thead>
<tr>
<th>Shank Size</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2&quot;</td>
<td>1051</td>
</tr>
<tr>
<td>3&quot;</td>
<td>1052</td>
</tr>
</tbody>
</table>

### Frost Wedge - 2" Width x 12" Blade Length
<table>
<thead>
<tr>
<th>Shank Size</th>
<th>Length Under Collar</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&quot; x 4-1/4&quot;</td>
<td>17&quot;</td>
<td>810</td>
</tr>
<tr>
<td>1-1/8&quot; x 6&quot;</td>
<td>17&quot;</td>
<td>812</td>
</tr>
<tr>
<td>1-1/4&quot; x 6&quot;</td>
<td>17&quot;</td>
<td>813</td>
</tr>
</tbody>
</table>

### Longer lengths available.
Chicago Pneumatic  Model CP-9A

**Roto Hammer**

Self-rotating hammer offers versatile service as a masonry drill or demolition tool in drilling hard materials such as bricks and concrete. With non-rotating chisels, the tool can be used for chipping and caulking jobs. Quick change chisel retainer allows fast conversion. Round bushing and clockwise rotation are standard. **NEW IMPORT MODEL MP-9B available. Accessories are listed below and on page 135.**

<table>
<thead>
<tr>
<th>Blows Per Minute</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>3400</td>
<td>8 lbs.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Piston Diameter</th>
<th>Piston Stroke</th>
<th>Air Inlet Thread</th>
<th>Avg. Air Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1/4&quot;</td>
<td>1-3/8&quot;</td>
<td>3/8&quot;</td>
<td>20 cfm</td>
</tr>
</tbody>
</table>

**Solid Carbide Tipped Drills**

**Non-Rotating Drills**

**Moil Point**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Length</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>4025</td>
<td>10&quot;</td>
<td>2 lbs.</td>
</tr>
</tbody>
</table>

**Flat Chisel**

**SDS-Plus Adapter  Model R137586**

Converts CP-9B to accept SDS-Plus bits.  
**See page 135 for SDS-Plus bits**

**Rotating Star Drills**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Drill Depth</th>
<th>4&quot;</th>
<th>8&quot;</th>
<th>12&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>4025</td>
<td>3/8&quot;</td>
<td>4030</td>
<td>4050</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>1/2&quot;</td>
<td>4032</td>
<td>4052</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>5/8&quot;</td>
<td>4034</td>
<td>4054</td>
<td>4070</td>
</tr>
<tr>
<td></td>
<td>3/4&quot;</td>
<td>4036</td>
<td>4056</td>
<td>4072</td>
</tr>
<tr>
<td></td>
<td>7/8&quot;</td>
<td>4038</td>
<td>4058</td>
<td>4074</td>
</tr>
<tr>
<td></td>
<td>1&quot;</td>
<td>4040</td>
<td>4060</td>
<td>4076SD</td>
</tr>
<tr>
<td></td>
<td>1-1/8&quot;</td>
<td>4042</td>
<td>4062</td>
<td>4078</td>
</tr>
<tr>
<td></td>
<td>1-1/4&quot;</td>
<td>4044</td>
<td>4064</td>
<td>4080SD</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Length</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>4021</td>
<td>10&quot;</td>
<td>2 lbs.</td>
</tr>
</tbody>
</table>
Nippon Pneumatic NRV-70

**Concrete Vibrator**

Powerful, high-frequency vibrators for compaction of concrete to produce dense concrete. Ideal for pours of low slump concrete in walls, columns and close quarters. Rugged, efficient, and easily maneuvered. **All vibrators are equipped with 8 ft. exhaust hose.**

**SDS-Plus Shank**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Size</th>
<th>Drill Depth</th>
<th>Overall Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>90006</td>
<td>3/16&quot;</td>
<td>4&quot;, 6&quot;, 8&quot;, 10&quot;, 12&quot;</td>
<td>6&quot;</td>
</tr>
<tr>
<td>90007</td>
<td>3/16&quot;</td>
<td>4&quot;, 6&quot;, 8&quot;, 10&quot;, 12&quot;</td>
<td>6&quot;</td>
</tr>
<tr>
<td>90004</td>
<td>3/16&quot;</td>
<td>4&quot;, 6&quot;, 8&quot;, 10&quot;, 12&quot;</td>
<td>6&quot;</td>
</tr>
<tr>
<td>90008</td>
<td>3/16&quot;</td>
<td>4&quot;, 6&quot;, 8&quot;, 10&quot;, 12&quot;</td>
<td>6&quot;</td>
</tr>
</tbody>
</table>

**Concrete Vibrator**

Designed for mass concrete containing up to 6" aggregate deposited from 8-yard buckets, in gravity dams, large piers, massive walls, etc.

**SDS-Plus Bits**

Designed for drilling concrete, brick, stone and other masonry materials. All tips are exclusively "HL Grade" (HL20) carbide. Each shaft is shot-peened for torque twist protection and annealed shafts help prevent breakage.

SDS-Plus bits fit all rotary hammers with SDS-Plus and Hilti chucks. The maximum energy per hammer blow is delivered through positive drive slots. Special asymmetrical spiral, undercut double fluting design removes debris more efficiently to reduce heat and extend drill life. Drills 15% faster than the average drill bit.

**SDS-Plus Shank**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Size</th>
<th>Drill Depth</th>
<th>Overall Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>90048</td>
<td>9/16&quot;</td>
<td>4&quot;, 6&quot;</td>
<td>6&quot;</td>
</tr>
<tr>
<td>90052</td>
<td>5/8&quot;</td>
<td>6&quot;, 8&quot;</td>
<td>10&quot;, 12&quot;</td>
</tr>
<tr>
<td>90053</td>
<td>5/8&quot;</td>
<td>6&quot;, 8&quot;</td>
<td>10&quot;, 12&quot;</td>
</tr>
<tr>
<td>90055</td>
<td>5/8&quot;</td>
<td>6&quot;, 8&quot;</td>
<td>10&quot;, 12&quot;</td>
</tr>
<tr>
<td>90059</td>
<td>3/4&quot;</td>
<td>6&quot;, 8&quot;</td>
<td>10&quot;, 12&quot;</td>
</tr>
<tr>
<td>90060</td>
<td>3/4&quot;</td>
<td>6&quot;, 8&quot;</td>
<td>10&quot;, 12&quot;</td>
</tr>
<tr>
<td>90061</td>
<td>3/4&quot;</td>
<td>6&quot;, 8&quot;</td>
<td>10&quot;, 12&quot;</td>
</tr>
<tr>
<td>90063</td>
<td>3/4&quot;</td>
<td>6&quot;, 8&quot;</td>
<td>10&quot;, 12&quot;</td>
</tr>
<tr>
<td>90065</td>
<td>5/8&quot;</td>
<td>6&quot;, 8&quot;</td>
<td>10&quot;, 12&quot;</td>
</tr>
<tr>
<td>90067</td>
<td>5/8&quot;</td>
<td>6&quot;, 8&quot;</td>
<td>10&quot;, 12&quot;</td>
</tr>
<tr>
<td>90069</td>
<td>5/8&quot;</td>
<td>6&quot;, 8&quot;</td>
<td>10&quot;, 12&quot;</td>
</tr>
<tr>
<td>90071</td>
<td>1&quot;</td>
<td>8&quot;, 10&quot;, 12&quot;</td>
<td>16&quot;, 18&quot;</td>
</tr>
<tr>
<td>90076</td>
<td>1&quot;</td>
<td>8&quot;, 10&quot;, 12&quot;</td>
<td>16&quot;, 18&quot;</td>
</tr>
</tbody>
</table>
Rock Drills & Accessories

Michigan Pneumatic

Rock Drills

Powerful, heavy-duty rock drills are recommended for heavy industrial maintenance work. The relative lightweight, fast drilling speed, stamina and easy holding of these drills has made them the standard of comparison the world over. A drill of the right weight and power is available for any kind of job. Ideal for continuous service in quarries and mines and highly effective for general excavation work. Equipped with a latch type retainer.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Shank Size</th>
<th>Blows Per Minute</th>
<th>Speed</th>
<th>Piston Dia. x Stroke</th>
<th>Overall Length</th>
<th>Weight</th>
</tr>
</thead>
</table>
| MP-RD30-78314   | 7/8" x 3-1/4"         | 2450             | 250   | 2-1/8" x 1-3/4"      | 18-1/2"        | 31 lbs.
| MP-RD30-78414   | 7/8" x 4-1/4"         |                  |       |                      | 19-1/2"        |        |
| MP-ERD60-78414  | 7/8" x 4-1/4"         | 1800             | 200   | 2-5/8" x 2-9/16"     | 22-3/8"        | 60 lbs.
| MP-ERD60        | 1" x 4-1/4"           |                  |       |                      |                |        |
| MP-ERD60-1      | 1" x 4-1/4"           |                  |       |                      |                |        |

Accessories listed below and on page 137.

Rock Drill Steels

<table>
<thead>
<tr>
<th>Length Under Collar</th>
<th>7/8&quot; hex x 3-1/4&quot; Steel Shank Size</th>
<th>1&quot; hex x 4-1/4&quot; Steel Shank Size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&quot;H&quot; Thread</td>
<td>&quot;E&quot; Thread</td>
</tr>
<tr>
<td></td>
<td>Part No.</td>
<td>Part No.</td>
</tr>
<tr>
<td>1 ft.</td>
<td>731-H</td>
<td>731-E</td>
</tr>
<tr>
<td>1-1/2 ft.</td>
<td>73112-H</td>
<td>73112-E</td>
</tr>
<tr>
<td>2 ft.</td>
<td>732-H</td>
<td>732-E</td>
</tr>
<tr>
<td>2-1/2 ft.</td>
<td>73212-H</td>
<td>73212-E</td>
</tr>
<tr>
<td>3 ft.</td>
<td>733-H</td>
<td>733-E</td>
</tr>
<tr>
<td>4 ft.</td>
<td>734-H</td>
<td>734-E</td>
</tr>
<tr>
<td>5 ft.</td>
<td>735-H</td>
<td>735-E</td>
</tr>
<tr>
<td>6 ft.</td>
<td>736-H</td>
<td>736-E</td>
</tr>
<tr>
<td>8 ft.</td>
<td>738-H</td>
<td>738-E</td>
</tr>
<tr>
<td>10 ft.</td>
<td>7310-H</td>
<td>7310-E</td>
</tr>
<tr>
<td></td>
<td>&quot;H&quot; Thread</td>
<td>&quot;D&quot; Thread</td>
</tr>
<tr>
<td></td>
<td>Part No.</td>
<td>Part No.</td>
</tr>
<tr>
<td></td>
<td>141-H</td>
<td>141-D</td>
</tr>
<tr>
<td></td>
<td>14112-H</td>
<td>14112-D</td>
</tr>
<tr>
<td></td>
<td>142-H</td>
<td>142-D</td>
</tr>
<tr>
<td></td>
<td>14212-H</td>
<td>14212-D</td>
</tr>
<tr>
<td></td>
<td>143-H</td>
<td>143-D</td>
</tr>
<tr>
<td></td>
<td>144-H</td>
<td>144-D</td>
</tr>
<tr>
<td></td>
<td>145-H</td>
<td>145-D</td>
</tr>
<tr>
<td></td>
<td>146-H</td>
<td>146-D</td>
</tr>
<tr>
<td></td>
<td>148-H</td>
<td>148-D</td>
</tr>
<tr>
<td></td>
<td>1410-H</td>
<td>1410-D</td>
</tr>
</tbody>
</table>

Please specify part number when ordering. Longer lengths and other shank sizes are available.

Threaded Rock Bits

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>15/16&quot;</td>
<td>LE23</td>
<td>LE26</td>
<td>LE28</td>
<td>LE32</td>
<td></td>
</tr>
<tr>
<td>1&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-1/8&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-1/4&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-3/8&quot;</td>
<td>LH35SH</td>
<td>LH38SH</td>
<td>LH41SH</td>
<td>LH44SH</td>
<td>HSC138</td>
</tr>
<tr>
<td>1-1/2&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>T1207M0</td>
</tr>
<tr>
<td>1-5/8&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>T1507M0</td>
</tr>
<tr>
<td>1-3/4&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>T1607M0</td>
</tr>
<tr>
<td>1-7/8&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>T1707M0</td>
</tr>
<tr>
<td>2&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>T1907M0</td>
</tr>
<tr>
<td>2-1/4&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>T2007M0</td>
</tr>
<tr>
<td>2-1/2&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>T2207M0</td>
</tr>
<tr>
<td>2-5/8&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>T2507M0</td>
</tr>
<tr>
<td>2-3/4&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-1/4&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-1/2&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please specify part number when ordering. Other series and style bits are available.

*Multi-use carbide bits are designed for multiple resharpening. See page 137 for additional accessories.
Drill Steel Accessories & Carbide Tipped Drills

7/8" x 3-1/4" Hex Shank

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Length Under Collar</th>
<th>Size</th>
<th>Drill Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>546</td>
<td>9&quot;</td>
<td>5/8&quot;</td>
<td>6&quot;</td>
</tr>
<tr>
<td>546-12</td>
<td>12&quot;</td>
<td>5/8&quot;</td>
<td>9&quot;</td>
</tr>
<tr>
<td>546-18</td>
<td>18&quot;</td>
<td>5/8&quot;</td>
<td>15&quot;</td>
</tr>
<tr>
<td>546-24</td>
<td>24&quot;</td>
<td>5/8&quot;</td>
<td>21&quot;</td>
</tr>
<tr>
<td>550</td>
<td>9&quot;</td>
<td>3/4&quot;</td>
<td>6&quot;</td>
</tr>
<tr>
<td>550-12</td>
<td>12&quot;</td>
<td>3/4&quot;</td>
<td>9&quot;</td>
</tr>
<tr>
<td>550-18</td>
<td>18&quot;</td>
<td>3/4&quot;</td>
<td>15&quot;</td>
</tr>
<tr>
<td>550-24</td>
<td>24&quot;</td>
<td>3/4&quot;</td>
<td>21&quot;</td>
</tr>
<tr>
<td>550-30</td>
<td>30&quot;</td>
<td>3/4&quot;</td>
<td>27&quot;</td>
</tr>
<tr>
<td>551</td>
<td>9&quot;</td>
<td>7/8&quot;</td>
<td>6&quot;</td>
</tr>
<tr>
<td>551-12</td>
<td>12&quot;</td>
<td>7/8&quot;</td>
<td>9&quot;</td>
</tr>
<tr>
<td>551-18</td>
<td>18&quot;</td>
<td>7/8&quot;</td>
<td>15&quot;</td>
</tr>
<tr>
<td>551-24</td>
<td>24&quot;</td>
<td>7/8&quot;</td>
<td>21&quot;</td>
</tr>
<tr>
<td>551-30</td>
<td>30&quot;</td>
<td>7/8&quot;</td>
<td>27&quot;</td>
</tr>
<tr>
<td>552</td>
<td>9&quot;</td>
<td>1&quot;</td>
<td>6&quot;</td>
</tr>
<tr>
<td>552-12</td>
<td>12&quot;</td>
<td>1&quot;</td>
<td>9&quot;</td>
</tr>
<tr>
<td>552-18</td>
<td>18&quot;</td>
<td>1&quot;</td>
<td>15&quot;</td>
</tr>
<tr>
<td>552-24</td>
<td>24&quot;</td>
<td>1&quot;</td>
<td>21&quot;</td>
</tr>
<tr>
<td>552-30</td>
<td>30&quot;</td>
<td>1&quot;</td>
<td>27&quot;</td>
</tr>
<tr>
<td>553-12</td>
<td>12&quot;</td>
<td>1-1/8&quot;</td>
<td>9&quot;</td>
</tr>
<tr>
<td>553-18</td>
<td>18&quot;</td>
<td>1-1/8&quot;</td>
<td>15&quot;</td>
</tr>
<tr>
<td>553-24</td>
<td>24&quot;</td>
<td>1-1/8&quot;</td>
<td>21&quot;</td>
</tr>
<tr>
<td>553-30</td>
<td>30&quot;</td>
<td>1-1/8&quot;</td>
<td>27&quot;</td>
</tr>
<tr>
<td>554-12</td>
<td>12&quot;</td>
<td>1-1/4&quot;</td>
<td>9&quot;</td>
</tr>
<tr>
<td>554-18</td>
<td>18&quot;</td>
<td>1-1/4&quot;</td>
<td>15&quot;</td>
</tr>
<tr>
<td>554-24</td>
<td>24&quot;</td>
<td>1-1/4&quot;</td>
<td>21&quot;</td>
</tr>
<tr>
<td>554-30</td>
<td>30&quot;</td>
<td>1-1/4&quot;</td>
<td>27&quot;</td>
</tr>
<tr>
<td>555-12</td>
<td>12&quot;</td>
<td>1-3/8&quot;</td>
<td>9&quot;</td>
</tr>
<tr>
<td>555-18</td>
<td>18&quot;</td>
<td>1-3/8&quot;</td>
<td>15&quot;</td>
</tr>
<tr>
<td>555-24</td>
<td>24&quot;</td>
<td>1-3/8&quot;</td>
<td>21&quot;</td>
</tr>
<tr>
<td>555-30</td>
<td>30&quot;</td>
<td>1-3/8&quot;</td>
<td>27&quot;</td>
</tr>
<tr>
<td>556-12</td>
<td>12&quot;</td>
<td>1-1/2&quot;</td>
<td>9&quot;</td>
</tr>
<tr>
<td>556-18</td>
<td>18&quot;</td>
<td>1-1/2&quot;</td>
<td>15&quot;</td>
</tr>
<tr>
<td>556-24</td>
<td>24&quot;</td>
<td>1-1/2&quot;</td>
<td>21&quot;</td>
</tr>
<tr>
<td>556-30</td>
<td>30&quot;</td>
<td>1-1/2&quot;</td>
<td>27&quot;</td>
</tr>
</tbody>
</table>

Drill Steel Extensions

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Overall Length</th>
<th>Thread</th>
</tr>
</thead>
<tbody>
<tr>
<td>522-2EXT</td>
<td>24&quot;</td>
<td>H</td>
</tr>
<tr>
<td>522-3EXT</td>
<td>36&quot;</td>
<td>H</td>
</tr>
<tr>
<td>522-4EXT</td>
<td>48&quot;</td>
<td>H</td>
</tr>
<tr>
<td>522-5EXT</td>
<td>60&quot;</td>
<td>H</td>
</tr>
<tr>
<td>522-6EXT</td>
<td>72&quot;</td>
<td>H</td>
</tr>
<tr>
<td>522-8EXT</td>
<td>96&quot;</td>
<td>H</td>
</tr>
</tbody>
</table>

Adapter & Couplings

**Model TH-D**
"H" to "D" Adapter

**Model TH-30**
"H" Threaded Coupling

Other adapters and couplings available.

See page 136 for additional accessories.
**Mini Air Hoists**

**Efficient, High Speed Material Handling**
NPK air hoists are engineered to provide high lifting speeds and accurate control. Lightweight, compact design for use in a stationary position, but can also be quickly moved to another location. Air hoists are extremely useful in hazardous environments where electrical hoists are prohibited. Features external brake adjustment, exhaust muffler, built-in lubricator and swivel mounted air inlet.

**Extra Rugged Construction**
Durable construction for constant, heavy-duty use. Designed for fast moving production assembly operations and heavy manufacturing industries.

**Overload-Proof Air Motor for a Wide Safety Margin**
The rotary vane air motor is completely enclosed. Motor is unaffected by fumes, dirt or heat. Motor and controls can withstand constant stopping and sudden starting. Can be overloaded or stalled without damage to the hoist. Motor is inherently self-cooling and cannot be burned out.

**Safety Hooks and Automatic Limit Stops**
Top and bottom hooks have safety snaps and hoist has automatic limit stops to prevent overtravel.

**Variable Speed Control**
Operator can choose any speed from the slowest creep to full throttle. The heaviest loads can be positioned quickly and accurately, or raised rapidly. Features an external screw adjustment for lift and descent speeds.

**Pendant Type Control**
Leaves the operator one hand free to guide the load with precise control. Preferred compact design and easy handling.

**Caution**
This equipment is not to be used for lifting, supporting or transporting people, or for lifting or supporting loads over people.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Chain Type</th>
<th>Capacity</th>
<th>Control</th>
<th>Standard Lift</th>
<th>No. of Falls</th>
<th>Std. Load Chain</th>
<th>Headroom</th>
<th>Lift Speed at Capacity</th>
<th>Weight (Lbs.)</th>
<th>Rec’d Hose Size</th>
<th>Air Inlet Thread</th>
<th>CFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>RHL-250</td>
<td>Link</td>
<td>550 lbs.</td>
<td>Pullcord</td>
<td>8 ft.</td>
<td>1</td>
<td>9 ft.</td>
<td>17°</td>
<td>88.6 ft./min.</td>
<td>35.2</td>
<td>1/2°</td>
<td>1/2°</td>
<td>45.9</td>
</tr>
<tr>
<td>RHL-250P</td>
<td>Link</td>
<td>550 lbs.</td>
<td>Pullcord</td>
<td>8 ft.</td>
<td>1</td>
<td>9 ft.</td>
<td>17°</td>
<td>41.3 ft./min.</td>
<td>39.6</td>
<td>1/2°</td>
<td>1/2°</td>
<td>45.9</td>
</tr>
<tr>
<td>RHL-500</td>
<td>Link</td>
<td>1100 lbs.</td>
<td>Pullcord</td>
<td>8 ft.</td>
<td>1</td>
<td>9 ft.</td>
<td>17°</td>
<td>18.7 ft./min.</td>
<td>48.4</td>
<td>1/2°</td>
<td>1/2°</td>
<td>51.7</td>
</tr>
<tr>
<td>RHL-500P</td>
<td>Link</td>
<td>1100 lbs.</td>
<td>Pullcord</td>
<td>8 ft.</td>
<td>2</td>
<td>18 ft.</td>
<td>20°</td>
<td>18.7 ft./min.</td>
<td>51.7</td>
<td>1/2°</td>
<td>1/2°</td>
<td>51.7</td>
</tr>
<tr>
<td>RHL-1000</td>
<td>Link</td>
<td>2200 lbs.</td>
<td>Pullcord</td>
<td>10 ft.</td>
<td>2</td>
<td>25 ft.</td>
<td>28°</td>
<td>7.2 ft./min.</td>
<td>132.0</td>
<td>3/4°</td>
<td>1/2°</td>
<td>60.0</td>
</tr>
<tr>
<td>RHL-1000P</td>
<td>Link</td>
<td>2200 lbs.</td>
<td>Pullcord</td>
<td>10 ft.</td>
<td>2</td>
<td>25 ft.</td>
<td>28°</td>
<td>7.2 ft./min.</td>
<td>132.0</td>
<td>3/4°</td>
<td>1/2°</td>
<td>60.0</td>
</tr>
<tr>
<td>RHL-2800</td>
<td>Link</td>
<td>6160 lbs.</td>
<td>Pullcord</td>
<td>10 ft.</td>
<td>2</td>
<td>25 ft.</td>
<td>28°</td>
<td>7.2 ft./min.</td>
<td>132.0</td>
<td>3/4°</td>
<td>1/2°</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Extra lift can be installed for an additional charge. Link chain hoists equipped with chain basket. Most parts for the above hoists are interchangeable with ARO, Chicago Pneumatic and Yale hoists.
**JET SMH Series**

**Hand Chain Hoists**

- Full range capacity 1/2 to 10-tons
- Standard features found only in higher priced models
- Economical hand chain hoist designed for years of trouble-free service
- All steel construction with a durable powder coat finish
- Lightweight, compact design for low headroom applications
- Needle bearing supported load sheave for smooth operation
- Completely enclosed Weston type automatic brake system for precise load spotting
- Triple-spur gears provide high efficiency ratio with minimum effort
- Induction hardened grade 80 load chain
- Drop forged hooks with heavy-duty safety latches swivel 360° for easy rigging
- Smooth rolled edge on hand chain cover prevents side pull jamming
- Standard hand chain drop equals lift length
- Proof tested with test certificate
- Complies with OSHA, ANSI/ASME B30.16 and HST-2 standards

**CAUTION**

Be sure that the supporting structures and load-attaching devices used in conjunction with this hoist provide an adequate safety factor to handle the rated load plus the weight of the equipment. If in doubt, consult a qualified structural engineer. **This equipment is not to be used for lifting, supporting or transporting people, or lifting or supporting loads over people.**

**IMPORTANT**

Before installation, read owner’s manual for additional warnings and precautions. Not for use in an explosive environment.

---

<table>
<thead>
<tr>
<th>Stock No.</th>
<th>Model</th>
<th>Capacity (Lbs.)</th>
<th>Standard Lift (Ft.)</th>
<th>Headroom (In.)</th>
<th>Number of Falls</th>
<th>Load Chain (Dia./MM)</th>
<th>Req. Hand Chain (Ft.) to Lift Load 1'</th>
<th>Pounds Pull to Lift Capacity</th>
<th>Ship Weight (Lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>101700</td>
<td>SMH-1/2T-10</td>
<td>1100</td>
<td>10</td>
<td>13</td>
<td>1</td>
<td>5.0</td>
<td>32</td>
<td>49</td>
<td>20</td>
</tr>
<tr>
<td>101702</td>
<td>SMH-1/2T-20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>29</td>
</tr>
<tr>
<td>101704</td>
<td>SMH-1T-10</td>
<td>2200</td>
<td>10</td>
<td>15</td>
<td>1</td>
<td>6.3</td>
<td>37</td>
<td>80</td>
<td>27</td>
</tr>
<tr>
<td>101706</td>
<td>SMH-1T-20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>38</td>
</tr>
<tr>
<td>101708</td>
<td>SMH-1-1/2T-10</td>
<td>3520</td>
<td>10</td>
<td>17-1/2</td>
<td>1</td>
<td>7.0</td>
<td>58</td>
<td>82</td>
<td>41</td>
</tr>
<tr>
<td>101710</td>
<td>SMH-1-1/2T-20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>56</td>
</tr>
<tr>
<td>101712</td>
<td>SMH-2T-10</td>
<td>4400</td>
<td>10</td>
<td>18-1/2</td>
<td>1</td>
<td>8.0</td>
<td>70</td>
<td>91</td>
<td>46</td>
</tr>
<tr>
<td>101714</td>
<td>SMH-2T-20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>60</td>
</tr>
<tr>
<td>101716</td>
<td>SMH-3T-10</td>
<td>6820</td>
<td>10</td>
<td>23-1/2</td>
<td>2</td>
<td>7.0</td>
<td>116</td>
<td>86</td>
<td>60</td>
</tr>
<tr>
<td>101718</td>
<td>SMH-3T-20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>80</td>
</tr>
<tr>
<td>101720</td>
<td>SMH-5T-10</td>
<td>11000</td>
<td>10</td>
<td>28</td>
<td>2</td>
<td>9.0</td>
<td>172</td>
<td>97</td>
<td>91</td>
</tr>
<tr>
<td>101722</td>
<td>SMH-5T-20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>122</td>
</tr>
<tr>
<td>101724</td>
<td>SMH-10T-10</td>
<td>22000</td>
<td>10</td>
<td>35</td>
<td>4</td>
<td>9.0</td>
<td>344</td>
<td>104</td>
<td>177</td>
</tr>
<tr>
<td>101726</td>
<td>SMH-10T-20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>232</td>
</tr>
</tbody>
</table>
JET L-90 Series

Hand Chain Hoists

- Full range capacity 1/2 to 10-tons
- Compact and portable for ease of positioning material
- Engineered for commercial and industrial lifting applications
- All steel construction with a durable powder coat finish
- Lightweight, compact design for low headroom applications
- Completely enclosed Weston type automatic brake system for positive load spotting
- Triple-spur gears provide high efficiency ratio with minimum effort
- Heat treated and hardened grade 80 load chain
- Smooth rolled edge on hand chain cover prevents side pull jamming
- Wide throat drop forged safety hooks for easier rigging
- Standard hand chain drop equals lift length
- Proof tested with test certificate
- Complies with OSHA, ANSI/ASME B30.16 and HST-2 standards

CAUTION

Be sure that the supporting structures and load-attaching devices used in conjunction with this hoist provide an adequate safety factor to handle the rated load plus the weight of the equipment. If in doubt, consult a qualified structural engineer. This equipment is not to be used for lifting, supporting or transporting people, or lifting or supporting loads over people.

IMPORTANT

Before installation, read owner’s manual for additional warnings and precautions. Not for use in an explosive environment.

<table>
<thead>
<tr>
<th>Stock No.</th>
<th>Model</th>
<th>Capacity (Lbs.)</th>
<th>Standard Lift (Ft.)</th>
<th>Headroom (In.)</th>
<th>Number of Falls</th>
<th>Load Chain (Dia./MM)</th>
<th>Req. Hand Chain (Ft.) to Lift Load 1'</th>
<th>Pounds Pull to Lift Capacity</th>
<th>Ship Weight (Lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>101505</td>
<td>L-90-1/2T-10</td>
<td>1100</td>
<td>10</td>
<td>10-3/4</td>
<td>1</td>
<td>5.0</td>
<td>29</td>
<td>59</td>
<td>23</td>
</tr>
<tr>
<td>101510</td>
<td>L-90-1T-10</td>
<td>2200</td>
<td>10</td>
<td>11-3/4</td>
<td>1</td>
<td>6.3</td>
<td>50</td>
<td>69</td>
<td>29</td>
</tr>
<tr>
<td>101515</td>
<td>L-90-1-1/2T-10</td>
<td>3520</td>
<td>10</td>
<td>13-1/4</td>
<td>1</td>
<td>7.1</td>
<td>60</td>
<td>91</td>
<td>37</td>
</tr>
<tr>
<td>101520</td>
<td>L-90-2T-10</td>
<td>4400</td>
<td>10</td>
<td>14-3/4</td>
<td>1</td>
<td>8.0</td>
<td>77</td>
<td>88</td>
<td>48</td>
</tr>
<tr>
<td>101530</td>
<td>L-90-3T-10</td>
<td>6820</td>
<td>10</td>
<td>20-7/8</td>
<td>2</td>
<td>7.1</td>
<td>120</td>
<td>88</td>
<td>56</td>
</tr>
<tr>
<td>101550</td>
<td>L-90-5T-10</td>
<td>11000</td>
<td>10</td>
<td>24-1/2</td>
<td>2</td>
<td>9.0</td>
<td>190</td>
<td>106</td>
<td>97</td>
</tr>
<tr>
<td>101560</td>
<td>L-90-10T-11-1/2</td>
<td>22000</td>
<td>11-1/2</td>
<td>30-1/2</td>
<td>4</td>
<td>9.0</td>
<td>385</td>
<td>116</td>
<td>209</td>
</tr>
</tbody>
</table>

Stock No. 101505
JET Material Handling

JET L-100 Series
Hand Chain Hoists

- Full range capacity 1/2 to 10-tons
- Compact and portable for ease of positioning material
- Engineered for commercial and industrial lifting applications
- All steel construction with a durable powder coat finish
- Lightweight, compact design for low headroom applications
- Completely enclosed Weston type automatic brake system for positive load spotting
- Triple-spur gears provide high efficiency ratio with minimum effort
- Heat treated and hardened grade 80 load chain
- Smooth rolled edge on hand chain cover prevents side pull jamming
- Wide throat drop forged safety hooks for easier rigging
- Standard hand chain drop equals lift length
- Proof tested with test certificate
- Complies with OSHA, ANSI/ASME B30.16 and HST-2 standards

CAUTION

Be sure that the supporting structures and load-attaching devices used in conjunction with this hoist provide an adequate safety factor to handle the rated load plus the weight of the equipment. If in doubt, consult a qualified structural engineer. This equipment is not to be used for lifting, supporting or transporting people, or lifting or supporting loads over people.

IMPORTANT

Before installation, read owner’s manual for additional warnings and precautions. Not for use in an explosive environment.

<table>
<thead>
<tr>
<th>Stock No.</th>
<th>Model</th>
<th>Capacity (Lbs.)</th>
<th>Standard Lift (Ft.)</th>
<th>Headroom (In.)</th>
<th>Number of Falls</th>
<th>Load Chain (Dia./MM)</th>
<th>Req. Hand Chain (Ft.) to Lift Load 1'</th>
<th>Pounds Pull to Lift Capacity</th>
<th>Ship Weight (Lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>104100</td>
<td>L-100-50WO-10</td>
<td>1100</td>
<td>10 20</td>
<td>11-1/4</td>
<td>1</td>
<td>5.0</td>
<td>25</td>
<td>53</td>
<td>24.00</td>
</tr>
<tr>
<td>205120</td>
<td>L-100-50WO-20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>34.00</td>
</tr>
<tr>
<td>102100</td>
<td>L-100-1TWO-10</td>
<td>2200</td>
<td>10 20</td>
<td>11-5/8</td>
<td>1</td>
<td>6.3</td>
<td>43</td>
<td>64</td>
<td>27.00</td>
</tr>
<tr>
<td>203120</td>
<td>L-100-1TWO-20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>39.25</td>
</tr>
<tr>
<td>101100</td>
<td>L-100-150WO-10</td>
<td>3300</td>
<td>10 20</td>
<td>13-3/4</td>
<td>1</td>
<td>7.1</td>
<td>57</td>
<td>77</td>
<td>34.25</td>
</tr>
<tr>
<td>201120</td>
<td>L-100-150WO-20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>48.00</td>
</tr>
<tr>
<td>105100</td>
<td>L-100-200WO-10</td>
<td>4400</td>
<td>10 20</td>
<td>14-3/4</td>
<td>1</td>
<td>8.0</td>
<td>70</td>
<td>79</td>
<td>44.00</td>
</tr>
<tr>
<td>206120</td>
<td>L-100-200WO-20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>59.00</td>
</tr>
<tr>
<td>106100</td>
<td>L-100-300WO-10</td>
<td>6600</td>
<td>10 20</td>
<td>20-1/8</td>
<td>2</td>
<td>7.1</td>
<td>114</td>
<td>79</td>
<td>53.00</td>
</tr>
<tr>
<td>207120</td>
<td>L-100-300WO-20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>74.00</td>
</tr>
<tr>
<td>107100</td>
<td>L-100-500WO-10</td>
<td>11000</td>
<td>10 20</td>
<td>23-5/8</td>
<td>2</td>
<td>9.0</td>
<td>198</td>
<td>75</td>
<td>90.00</td>
</tr>
<tr>
<td>208120</td>
<td>L-100-500WO-20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>119.50</td>
</tr>
<tr>
<td>108100</td>
<td>L-100-1000WO-10</td>
<td>22000</td>
<td>10 20</td>
<td>29-7/8</td>
<td>4</td>
<td>9.0</td>
<td>396</td>
<td>79</td>
<td>174.00</td>
</tr>
<tr>
<td>209120</td>
<td>L-100-1000WO-20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>227.00</td>
</tr>
</tbody>
</table>
JET  JLH Series

Lever Hoists
- 3/4-ton to 6-ton Capacities
- Available in 5ft, 10ft, and 20ft lifts
- Light weight, compact design for low head room applications
- All units feature premium 100 grade chain for extreme wear resistance
- Patented fused break disc design for low maintenance
- Caged roller bearings used on load sprocket increase ease of use and efficiency
- Lever Hoist with Overload Protection

CAUTION
Be sure that the supporting structures and load-attaching devices used in conjunction with this hoist provide an adequate safety factor to handle the rated load plus the weight of the equipment. If in doubt, consult a qualified structural engineer. This equipment is not to be used for lifting, supporting or transporting people, or lifting or supporting loads over people.

IMPORTANT
Before installation, read owner’s manual for additional warnings and precautions. Not for use in an explosive environment.

Stock No. 210010

<table>
<thead>
<tr>
<th>Stock No.</th>
<th>Model No.</th>
<th>Capacity (Tons)</th>
<th>Capacity (Lbs.)</th>
<th>Standard Lift (Ft.)</th>
<th>Headroom (In.)</th>
<th>Number of Falls</th>
<th>Load Chain (dia/mm)</th>
<th>Lever Length (In.)</th>
<th>Pounds of Pull To Lift Capacity</th>
<th>Lift Per Full Turn of Lever (In.)</th>
<th>Weight (Lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>375005</td>
<td>JLH-80WO-5</td>
<td>0.8</td>
<td>1760</td>
<td>5</td>
<td>11</td>
<td>1</td>
<td>5.6</td>
<td>9-5/8</td>
<td>64</td>
<td>1-1/8</td>
<td>12.50</td>
</tr>
<tr>
<td>375010</td>
<td>JLH-80WO-10</td>
<td>1.6</td>
<td>3520</td>
<td>5</td>
<td>13.1</td>
<td>1</td>
<td>7.1</td>
<td>10-3/8</td>
<td>75</td>
<td>7/8</td>
<td>17.50</td>
</tr>
<tr>
<td>375020</td>
<td>JLH-80WO-20</td>
<td>3.2</td>
<td>7040</td>
<td>5</td>
<td>15.5</td>
<td>1</td>
<td>10</td>
<td>16-5/16</td>
<td>82</td>
<td>3/4</td>
<td>30.00</td>
</tr>
<tr>
<td>315005</td>
<td>JLH-160WO-5</td>
<td>6.3</td>
<td>13860</td>
<td>5</td>
<td>21.2</td>
<td>1</td>
<td>10</td>
<td>16-5/16</td>
<td>84</td>
<td>3/8</td>
<td>57.25</td>
</tr>
<tr>
<td>315010</td>
<td>JLH-160WO-10</td>
<td>12.5</td>
<td>21000</td>
<td>5</td>
<td>26.2</td>
<td>1</td>
<td>10</td>
<td>20-1/2</td>
<td>104</td>
<td>4/5</td>
<td>106.00</td>
</tr>
<tr>
<td>315020</td>
<td>JLH-160WO-20</td>
<td>18.8</td>
<td>42000</td>
<td>5</td>
<td>31.5</td>
<td>1</td>
<td>10</td>
<td>26-1/2</td>
<td>160</td>
<td>5/8</td>
<td>180.00</td>
</tr>
</tbody>
</table>

Stock No. 210020
JET Material Handling

JET JLP Series

Lever Hoists

- Economical lever hoist designed for years of trouble-free operation
- 3/4-ton to 6-ton capacities
- 5', 10', and 20' lifts available
- All steel construction with a durable powder coat finish
- Completely enclosed Weston type automatic brake system holds load in any position
- Easy-to-use with single hand operation and control
- Simple design makes routine inspection and maintenance easy
- Freewheeling feature without load for quick load attachment
- Hardened grade 80 low wear chain
- Drop forged hooks with heavy-duty safety latches swivel 360° for easy rigging
- Proof tested with test certificate
- Complies with OSHA, ANSI/ASME B30.21 and HST-3 standards

CAUTION

Be sure that the supporting structures and load-attaching devices used in conjunction with this hoist provide an adequate safety factor to handle the rated load plus the weight of the equipment. If in doubt, consult a qualified structural engineer. This equipment is not to be used for lifting, supporting or transporting people, or lifting or supporting loads over people.

IMPORTANT

Before installation, read owner’s manual for additional warnings and precautions. Not for use in an explosive environment.

<table>
<thead>
<tr>
<th>Stock No.</th>
<th>Model</th>
<th>Rated Capacity (Ton)</th>
<th>Standard Lift (Ft.)</th>
<th>Min. Distance Between Hooks (In.)</th>
<th>No. of Falls</th>
<th>Load Chain (Dia./MM)</th>
<th>Lever Length (In.)</th>
<th>Pounds Pull to Lift Capacity</th>
<th>Lift Per Full Turn of Lever (In.)</th>
<th>Ship Weight (Lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>187707</td>
<td>JLP-75-5</td>
<td>3/4</td>
<td>5</td>
<td>12-7/16</td>
<td>1</td>
<td>6</td>
<td>10-1/4</td>
<td>32</td>
<td>3/4</td>
<td>17</td>
</tr>
<tr>
<td>187708</td>
<td>JLP-75-10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>187710</td>
<td>JLP-75-20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>25</td>
</tr>
<tr>
<td>187711</td>
<td>JLP-150-5</td>
<td>1-1/2</td>
<td>5</td>
<td>14</td>
<td>1</td>
<td>8</td>
<td>16-1/8</td>
<td>42</td>
<td>7/8</td>
<td>28</td>
</tr>
<tr>
<td>187712</td>
<td>JLP-150-10</td>
<td></td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>33</td>
</tr>
<tr>
<td>187714</td>
<td>JLP-150-20</td>
<td></td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>43</td>
</tr>
<tr>
<td>187715</td>
<td>JLP-300-5</td>
<td>3</td>
<td>5</td>
<td>19-3/4</td>
<td>1</td>
<td>10</td>
<td>16-1/8</td>
<td>72</td>
<td>5/8</td>
<td>46</td>
</tr>
<tr>
<td>187716</td>
<td>JLP-300-10</td>
<td></td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>54</td>
</tr>
<tr>
<td>187718</td>
<td>JLP-300-20</td>
<td></td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>69</td>
</tr>
<tr>
<td>187719</td>
<td>JLP-600-5</td>
<td>6</td>
<td>5</td>
<td>24-7/16</td>
<td>2</td>
<td>10</td>
<td>16-1/8</td>
<td>76</td>
<td>5/8</td>
<td>68</td>
</tr>
<tr>
<td>187720</td>
<td>JLP-600-20</td>
<td></td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>113</td>
</tr>
</tbody>
</table>

Stock No. 187711
JET Material Handling

**JET PT Series Industrial-Duty Plain Trolleys**
- Designed for low maintenance and trouble-free operation through a wide range of beams
- 1/2 ton to 10-ton capacity
- For use with wide-flange H-beams, standard I-beams, or curved track
- Multiple spacer washers make beam flange width adjustment quick and easy
- Rugged steel side plates feature built-in bumper guards
- Hardened wheels with lubricated for life, double sealed ball bearings
- Proof tested with test certificate
- Compliance: OSHA, ANSI/ASME B30.11 and B30.17 standards

<table>
<thead>
<tr>
<th>Stock No.</th>
<th>Model</th>
<th>Capacity (Ton)</th>
<th>Beam Flange Width (In.)</th>
<th>Beam Height (Ft.)</th>
<th>Min. Radius Curve (In.)</th>
<th>Ship Weight (Lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>252005</td>
<td>1/2 PT</td>
<td>1/2</td>
<td>2-1/2 – 8</td>
<td></td>
<td></td>
<td>39</td>
</tr>
<tr>
<td>252010</td>
<td>1 PT</td>
<td>1</td>
<td>3 – 8</td>
<td></td>
<td></td>
<td>39</td>
</tr>
<tr>
<td>252015</td>
<td>1-1/2 PT</td>
<td>1-1/2</td>
<td>3-1/4 – 8</td>
<td></td>
<td></td>
<td>43</td>
</tr>
<tr>
<td>252020</td>
<td>2 PT</td>
<td>2</td>
<td>3-1/4 – 8</td>
<td></td>
<td></td>
<td>43</td>
</tr>
<tr>
<td>252030</td>
<td>3 PT</td>
<td>3</td>
<td>4 – 8</td>
<td></td>
<td></td>
<td>51</td>
</tr>
<tr>
<td>252050</td>
<td>5 PT</td>
<td>5</td>
<td>4-5/6 – 8</td>
<td></td>
<td></td>
<td>55</td>
</tr>
<tr>
<td>252060</td>
<td>10 PT</td>
<td>10</td>
<td>4-3/4 – 8</td>
<td></td>
<td></td>
<td>67</td>
</tr>
</tbody>
</table>

**Dimensions (In.)**

<table>
<thead>
<tr>
<th>Model</th>
<th>Dim. (In.)</th>
<th>Min A</th>
<th>Max A</th>
<th>Min B</th>
<th>Max B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>Max. F</th>
<th>Min. F</th>
<th>Min. G</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>JBC-1</td>
<td>9-21/32</td>
<td>7-3/32</td>
<td>14-11/64</td>
<td>2-3/4</td>
<td>13/64</td>
<td>9-9/32</td>
<td>5-5/16</td>
<td>3-35/64</td>
<td>1-3/16</td>
<td>13/16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JBC-2</td>
<td>9-21/32</td>
<td>7-3/32</td>
<td>14-11/64</td>
<td>2-29/32</td>
<td>1/4</td>
<td>9-9/32</td>
<td>5-5/16</td>
<td>3-35/64</td>
<td>1-3/16</td>
<td>13/16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JBC-3</td>
<td>11-5/8</td>
<td>9-27/32</td>
<td>17-11/32</td>
<td>4-21/32</td>
<td>5/16</td>
<td>10-1/4</td>
<td>6-11/16</td>
<td>4-11/32</td>
<td>2-11/64</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JBC-5</td>
<td>11-7/32</td>
<td>10-7/16</td>
<td>19-3/32</td>
<td>5-1/2</td>
<td>25/64</td>
<td>10-1/4</td>
<td>6-15/16</td>
<td>4-15/16</td>
<td>2-3/64</td>
<td>1-7/64</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**JET SBC Series Industrial-Duty Beam Clamps**
- For construction, commercial and industrial vertical or horizontal rigging operations
- 1-ton to 5-ton capacities
- Mount hoists or lift beams with portable lightweight clamp
- Adjusts with ease to fit a broad range of wide-flange H or standard I-beams
- Clamp jaw designed to distribute the load away from beam flange edge
- Low headroom with built-in suspension rod
- Proof tested with test certificate
- Compliance: ANSI/ASME B30.17 and B30.20 standards

**CAUTION**
Read owners manual for additional warnings and precautions before use. Failure to read, understand and follow all instructions can result in serious injury. Do not exceed rated capacity. Use clamp only if authorized and properly trained. Do not move unbalanced load. Not for use in explosive environment.

<table>
<thead>
<tr>
<th>Stock No.</th>
<th>Model</th>
<th>Capacity (Lbs.)</th>
<th>Beam Flange Width (In.)</th>
<th>Ship Weight (Lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>252710</td>
<td>JBC-1</td>
<td>2000</td>
<td>2-31/32-8-21/32</td>
<td>12 lbs.</td>
</tr>
<tr>
<td>252720</td>
<td>JBC-2</td>
<td>4000</td>
<td>2-31/32-8-21/32</td>
<td>14 lbs.</td>
</tr>
<tr>
<td>252730</td>
<td>JBC-3</td>
<td>6000</td>
<td>3-15/16-9-2/32</td>
<td>27 lbs.</td>
</tr>
<tr>
<td>252750</td>
<td>JBC-5</td>
<td>10000</td>
<td>4-15/16-10-5/8</td>
<td>34 lbs.</td>
</tr>
</tbody>
</table>
**JET JHJ Series**

**Heavy-Duty Industrial Bottle Jacks**
- For lifting, pushing, spreading, bending, pressing or straightening requirements
- Not affected by temperature extremes
- Low profile truck models or standard models
- Electrically welded base and cylinders to assure strength and eliminate leaks
- All models work in upright, angle or horizontal position
- Pump handle included
- Carrying handles on 12-1/2 to 100-ton models
- Complies with ANSI/ASME B30.1 and PALD-1 standards

<table>
<thead>
<tr>
<th>Stock No.</th>
<th>Model</th>
<th>Rated Capacity (Ton)</th>
<th>Minimum Height (In.)</th>
<th>Piston Height (In.)</th>
<th>Head Screw (H/In.)</th>
<th>Max. Height (In.)</th>
<th>Base Size (LXW/In.)</th>
<th>Ship Weight (Lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>453301</td>
<td>JHJ-2</td>
<td>2</td>
<td>7-1/8</td>
<td>4-1/2</td>
<td>2</td>
<td>13-5/8</td>
<td>4-1/2 x 2-1/2</td>
<td>5</td>
</tr>
<tr>
<td>453303</td>
<td>JHJ-3</td>
<td>3</td>
<td>7-1/2</td>
<td>4-1/2</td>
<td>2-3/8</td>
<td>14-3/8</td>
<td>4-9/16 x 2-13/16</td>
<td>6</td>
</tr>
<tr>
<td>453305</td>
<td>JHJ-5</td>
<td>5</td>
<td>7-7/8</td>
<td>4-5/8</td>
<td>2-3/4</td>
<td>15-1/2</td>
<td>5-6/8 x 3-1/4</td>
<td>9</td>
</tr>
<tr>
<td>453308</td>
<td>JHJ-8</td>
<td>8</td>
<td>7-7/8</td>
<td>4-5/8</td>
<td>2-3/4</td>
<td>15-1/2</td>
<td>6 x 3-1/2</td>
<td>13</td>
</tr>
<tr>
<td>453312</td>
<td>JHJ-12 1/2</td>
<td>12-1/2</td>
<td>9-1/2</td>
<td>5-7/8</td>
<td>3-1/8</td>
<td>18-1/2</td>
<td>6-1/2 x 4-1/8</td>
<td>18</td>
</tr>
<tr>
<td>453313K</td>
<td>JHJ-12 1/2L</td>
<td>12-1/2</td>
<td>9-1/2</td>
<td>5-7/8</td>
<td>3-1/8</td>
<td>13-3/8</td>
<td>6-1/2 x 4-1/8</td>
<td>15</td>
</tr>
<tr>
<td>453317</td>
<td>JHJ-17 1/2</td>
<td>17-1/2</td>
<td>10-3/8</td>
<td>6-1/2</td>
<td>3-1/8</td>
<td>20</td>
<td>7-1/8 x 4-5/8</td>
<td>24</td>
</tr>
<tr>
<td>453318K</td>
<td>JHJ-17 1/2L</td>
<td>17-1/2</td>
<td>10-3/8</td>
<td>6-1/2</td>
<td>3-1/8</td>
<td>20</td>
<td>7-1/8 x 4-5/8</td>
<td>19</td>
</tr>
<tr>
<td>453322</td>
<td>JHJ-22 1/2</td>
<td>22-1/2</td>
<td>10-5/8</td>
<td>6-1/4</td>
<td>-</td>
<td>16-7/8</td>
<td>7-1/8 x 5-1/2</td>
<td>28</td>
</tr>
<tr>
<td>453323K</td>
<td>JHJ-22 1/2L</td>
<td>22-1/2</td>
<td>10-5/8</td>
<td>6-1/4</td>
<td>-</td>
<td>16-7/8</td>
<td>7-1/8 x 5-1/2</td>
<td>28</td>
</tr>
<tr>
<td>453335K</td>
<td>JHJ-35</td>
<td>35</td>
<td>11</td>
<td>6-1/4</td>
<td>-</td>
<td>17-1/4</td>
<td>8-3/8 x 5-1/2</td>
<td>48</td>
</tr>
<tr>
<td>453360K</td>
<td>JHJ-60</td>
<td>60</td>
<td>12</td>
<td>6-3/4</td>
<td>-</td>
<td>8-5/8</td>
<td>9-1/4 x 7-3/8</td>
<td>82</td>
</tr>
<tr>
<td>453399K</td>
<td>JHJ-100</td>
<td>100</td>
<td>12</td>
<td>5-23/32</td>
<td>-</td>
<td>17-11/16</td>
<td>14-31/32 x 10-7/16</td>
<td>225</td>
</tr>
</tbody>
</table>

**JET PTX & JTX Series**

**Pallet Trucks**
- One-piece cast pump features high quality seals, hardened and chrome plated ram and piston, top-of stroke and overload bypass valves
- Rounded fork tips with nylon guide rollers for trouble-free pallet entry and exit
- Solid steel push rod never needs adjustment
- 210° turning radius
- Large 8" poly over aluminum steering wheels feature double sealed, life time lubricated bearings (*JTX Model*)
- 2-1/2" turning radius (*PTX Model*)

**Dimensions (In.)**

<table>
<thead>
<tr>
<th>Stock No.</th>
<th>Model</th>
<th>Capacity</th>
<th>W1</th>
<th>W2</th>
<th>L1</th>
<th>L2</th>
<th>H1</th>
<th>H2</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>Ship Weight (Lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>140093</td>
<td>PTX-2748</td>
<td>5500 lbs.</td>
<td>27</td>
<td>6</td>
<td>48</td>
<td>63</td>
<td>6-1/4</td>
<td>2-1/2</td>
<td>7 x 2</td>
<td>2-1/2 x 3-3/4</td>
<td>47-1/4</td>
<td>196</td>
</tr>
<tr>
<td>140800</td>
<td>JTX-2748</td>
<td>8000 lbs.</td>
<td>27</td>
<td>6-1/4</td>
<td>48</td>
<td>63-1/2</td>
<td>6-1/4</td>
<td>3-1/4</td>
<td>8 x 2</td>
<td>3-1/4 x 3-1/2</td>
<td>49-1/4</td>
<td>240</td>
</tr>
</tbody>
</table>
**Short Drum Tuggers**

Light, compact tuggers designed for low air consumption and high efficiency. Can be mounted to a wall, floor or ceiling. Can also be mounted to a portable compressor and moved from one job to another. *Allow 120 days for delivery.*

---

### Michigan Pneumatic Manual Brake Models

<table>
<thead>
<tr>
<th>Short Drum Model No.</th>
<th>Capacity</th>
<th>Line Speed @ Capacity</th>
<th>Cable Capacity</th>
<th>Air Inlet Thread</th>
<th>Weight w/o Rope</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-W05AA3SACMB</td>
<td>1100 lbs.</td>
<td>62 ft.</td>
<td>213 ft. 147 ft.</td>
<td>3/4&quot; 1&quot;</td>
<td>97 lbs. 566 lbs.</td>
</tr>
<tr>
<td>MP-W10220SACMB</td>
<td>2200 lbs.</td>
<td>121 ft.</td>
<td>- - 688 ft. 475 ft. 383 ft.</td>
<td>- -</td>
<td>- 1-1/4&quot; 586 lbs. 1035 lbs.</td>
</tr>
<tr>
<td>MP-W20220SACMB</td>
<td>4400 lbs.</td>
<td>62 ft.</td>
<td>- - - -</td>
<td>- -</td>
<td>-</td>
</tr>
<tr>
<td>MP-W3036SACMB</td>
<td>6600 lbs.</td>
<td>62 ft.</td>
<td>- - - -</td>
<td>- -</td>
<td>-</td>
</tr>
</tbody>
</table>

**Drum Guards**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Fits Tool Model No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>E302-104G</td>
<td>MP-W05 Series</td>
</tr>
<tr>
<td>E398-003G</td>
<td>MP-W10220LAAB</td>
</tr>
<tr>
<td>E398-001G</td>
<td>MP-W10220LACMB</td>
</tr>
<tr>
<td>E398-007G</td>
<td>MP-W3036LAAB</td>
</tr>
<tr>
<td>E305-013G</td>
<td>MP-W5036LAAB</td>
</tr>
</tbody>
</table>

---

### Michigan Pneumatic Automatic Brake Models

<table>
<thead>
<tr>
<th>Short Drum Model No.</th>
<th>Capacity</th>
<th>Line Speed @ Capacity</th>
<th>Cable Capacity</th>
<th>Air Inlet Thread</th>
<th>Weight w/o Rope</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-W05AA3SAB *</td>
<td>1100 lbs.</td>
<td>62 ft.</td>
<td>213 ft. 147 ft.</td>
<td>3/4&quot; 1&quot;</td>
<td>104 lbs. 588 lbs.</td>
</tr>
<tr>
<td>MP-W10220SAAB</td>
<td>2200 lbs.</td>
<td>121 ft.</td>
<td>- - 688 ft. 475 ft. 383 ft.</td>
<td>- -</td>
<td>- 1-1/4&quot; 608 lbs. 1066 lbs.</td>
</tr>
<tr>
<td>MP-W20220SAAB *</td>
<td>4400 lbs.</td>
<td>62 ft.</td>
<td>- - - -</td>
<td>- -</td>
<td>-</td>
</tr>
<tr>
<td>MP-W3036SAAB *</td>
<td>6600 lbs.</td>
<td>62 ft.</td>
<td>- - - -</td>
<td>- -</td>
<td>-</td>
</tr>
</tbody>
</table>

Remote control units available for most models.
Michigan Pneumatic

Air Tuggers

Long Drum Tuggers

Light, compact tuggers designed for low air consumption and high efficiency. Can be mounted to a wall, floor or ceiling. Can also be mounted to a portable compressor and moved from one job to another. *Allow 120 days for delivery.

Michigan Pneumatic Manual Brake Models

<table>
<thead>
<tr>
<th>Long Drum Model No.</th>
<th>Capacity</th>
<th>Line Speed @ Capacity</th>
<th>Cable Capacity</th>
<th>Air Inlet Thread</th>
<th>Weight w/o Rope</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-HUL</td>
<td>2000 lbs.</td>
<td>110 ft.</td>
<td>1445 ft.</td>
<td>1&quot;</td>
<td>562 lbs.</td>
</tr>
<tr>
<td>MP-W10220LACMB</td>
<td>2200 lbs.</td>
<td>121 ft.</td>
<td>1378 ft.</td>
<td>1/2&quot;</td>
<td>608 lbs.</td>
</tr>
<tr>
<td>MP-W20220LACMB</td>
<td>4400 lbs.</td>
<td>62 ft.</td>
<td>-</td>
<td>-</td>
<td>632 lbs.</td>
</tr>
<tr>
<td>MP-W3036LACMB</td>
<td>6600 lbs.</td>
<td>62 ft.</td>
<td>-</td>
<td>3/4&quot;</td>
<td>1130 lbs.</td>
</tr>
<tr>
<td>MP-W5036LACMB</td>
<td>11000 lbs.</td>
<td>36 ft.</td>
<td>-</td>
<td>7/8&quot;</td>
<td>1890 lbs.</td>
</tr>
<tr>
<td>MP-W5045LACMB</td>
<td>11000 lbs.</td>
<td>59 ft.</td>
<td>-</td>
<td>-</td>
<td>1958 lbs.</td>
</tr>
</tbody>
</table>

Michigan Pneumatic Automatic Brake Models

<table>
<thead>
<tr>
<th>Long Drum Model No.</th>
<th>Capacity</th>
<th>Line Speed @ Capacity</th>
<th>Cable Capacity</th>
<th>Air Inlet Thread</th>
<th>Weight w/o Rope</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-W10220LAAB *</td>
<td>2200 lbs.</td>
<td>121 ft.</td>
<td>1378 ft.</td>
<td>1&quot;</td>
<td>652 lbs.</td>
</tr>
<tr>
<td>MP-W20220LAAB *</td>
<td>4400 lbs.</td>
<td>62 ft.</td>
<td>-</td>
<td>1&quot;</td>
<td>654 lbs.</td>
</tr>
<tr>
<td>MP-W3036LAAB *</td>
<td>6600 lbs.</td>
<td>62 ft.</td>
<td>-</td>
<td>1-1/4&quot;</td>
<td>1161 lbs.</td>
</tr>
<tr>
<td>MP-W5036LAAB</td>
<td>11000 lbs.</td>
<td>36 ft.</td>
<td>-</td>
<td>7-1/4&quot;</td>
<td>1923 lbs.</td>
</tr>
</tbody>
</table>

Remote control units available for most models.
**Michigan Pneumatic**

### Tool Balancers

Applied ergonomics makes load weightless. Features reinforced hanging bracket with safety hook for ceiling mounting and extra holes for safety chain attachments. **Locking models available.**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Tension Range</th>
<th>Cable Travel</th>
<th>Min. Hook to Hook Dist.</th>
<th>Cable Material</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-BD01</td>
<td>0.5-1.5 lbs.</td>
<td>5 ft.</td>
<td>9-1/4&quot;</td>
<td>Coated Steel</td>
<td>1.25 lbs.</td>
</tr>
<tr>
<td>MP-BD03</td>
<td>1.5-3 lbs.</td>
<td>8 ft.</td>
<td>13-7/8&quot;</td>
<td>Coated Steel</td>
<td>6 lbs.</td>
</tr>
<tr>
<td>MP-BD05</td>
<td>3-5 lbs.</td>
<td>10 ft.</td>
<td>18-1/2&quot;</td>
<td>Coated Steel</td>
<td>10 lbs.</td>
</tr>
<tr>
<td>MP-BG07</td>
<td>5-10 lbs.</td>
<td>5 ft.</td>
<td>9-1/4&quot;</td>
<td>Coated Steel</td>
<td>1.25 lbs.</td>
</tr>
<tr>
<td>MP-BG10</td>
<td>8-12 lbs.</td>
<td>8 ft.</td>
<td>13-7/8&quot;</td>
<td>Coated Steel</td>
<td>6 lbs.</td>
</tr>
<tr>
<td>MP-BG15</td>
<td>10-15 lbs.</td>
<td>10 ft.</td>
<td>18-1/2&quot;</td>
<td>Coated Steel</td>
<td>10 lbs.</td>
</tr>
<tr>
<td>MP-BG20</td>
<td>16-23 lbs.</td>
<td>12 ft.</td>
<td>24-1/2&quot;</td>
<td>Coated Steel</td>
<td>15 lbs.</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic**

### Hubbell Balancers

Applied ergonomics makes load weightless. Features reinforced hanging bracket with safety hook for ceiling mounting and extra holes for safety chain attachments. **Locking models available.**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Tension Range</th>
<th>Cable Travel</th>
<th>Min. Hook to Hook Dist.</th>
<th>Cable Material</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-BL02</td>
<td>1-3.5 lbs.</td>
<td>8 ft.</td>
<td>10-1/4&quot;</td>
<td>Nylon</td>
<td>2.75 lbs.</td>
</tr>
<tr>
<td>MP-BL05</td>
<td>2-4.5 lbs.</td>
<td>8 ft.</td>
<td>10-1/4&quot;</td>
<td>Nylon</td>
<td>2.75 lbs.</td>
</tr>
<tr>
<td>MP-BL08</td>
<td>4.5-8 lbs.</td>
<td>8 ft.</td>
<td>10-1/4&quot;</td>
<td>Nylon</td>
<td>3 lbs.</td>
</tr>
<tr>
<td>MP-BL10</td>
<td>6.5-13.5 lbs</td>
<td>8 ft.</td>
<td>10-1/4&quot;</td>
<td>Nylon</td>
<td>3 lbs.</td>
</tr>
<tr>
<td>MP-BL15</td>
<td>11-19 lbs.</td>
<td>8 ft.</td>
<td>10-1/4&quot;</td>
<td>Nylon</td>
<td>3.5 lbs.</td>
</tr>
<tr>
<td>MP-BL25</td>
<td>18-25 lbs.</td>
<td>8 ft.</td>
<td>10-1/4&quot;</td>
<td>Nylon</td>
<td>3.5 lbs.</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic**

### Heavy-Duty Tool Balancers

Rugged, compact, precision engineered tool balancers designed to improve productivity while reducing maintenance costs of small tools and operator fatigue. Smooth tension through the full cable length, plus an adjustment knob for tension control is your assurance of the safest, most reliable tool balancer. Keeps tools always at the ready with no lifting and no wasted motion.

- **Heavy-duty all steel construction.**
- **Ready for immediate installation with tool clip.**
- **Simple external tension adjustment.**
- **Automatic safety lock.**
- **Adjustable cable stop for convenient operation.**
- **Self-contained mainspring.**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Tension Range</th>
<th>Cable Travel</th>
<th>Min. Hook to Hook Dist.</th>
<th>Cable Material</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-BL02</td>
<td>1-3.5 lbs.</td>
<td>8 ft.</td>
<td>10-1/4&quot;</td>
<td>Nylon</td>
<td>2.75 lbs.</td>
</tr>
<tr>
<td>MP-BL05</td>
<td>2-4.5 lbs.</td>
<td>8 ft.</td>
<td>10-1/4&quot;</td>
<td>Nylon</td>
<td>2.75 lbs.</td>
</tr>
<tr>
<td>MP-BL08</td>
<td>4.5-8 lbs.</td>
<td>8 ft.</td>
<td>10-1/4&quot;</td>
<td>Nylon</td>
<td>3 lbs.</td>
</tr>
<tr>
<td>MP-BL10</td>
<td>6.5-13.5 lbs</td>
<td>8 ft.</td>
<td>10-1/4&quot;</td>
<td>Nylon</td>
<td>3 lbs.</td>
</tr>
<tr>
<td>MP-BL15</td>
<td>11-19 lbs.</td>
<td>8 ft.</td>
<td>10-1/4&quot;</td>
<td>Nylon</td>
<td>3.5 lbs.</td>
</tr>
<tr>
<td>MP-BL25</td>
<td>18-25 lbs.</td>
<td>8 ft.</td>
<td>10-1/4&quot;</td>
<td>Nylon</td>
<td>3.5 lbs.</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic**

### Model BM-SK3

**Torque Reaction Arm**

Bench mounted telescoping reaction arm eliminates sidekick torque up to 200 in.-lbs. Bolts directly to workspace. **Other styles available. All accessories except the screwdriver are included as shown.**

<table>
<thead>
<tr>
<th>Range of Motion</th>
<th>Working Radius</th>
<th>Tool Support Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>360° in Most Planes</td>
<td>16&quot; to 32&quot;</td>
<td>Up to 5 lbs.</td>
</tr>
</tbody>
</table>

**Option: BC-1062**

Optional Bench Clamp
### Michigan Pneumatic

#### Low Range Balancers

**Lightweight Steel Construction**
- Balance Range 1.1 - 3.3 lbs.
- 3/32" diameter steel cable.

Standard reel type spring balancer for light loads.

#### Medium-Duty Balancers

**Cast Aluminum Construction**
- Balance Range 2.2 - 14.3 lbs.
- 1/8" diameter steel cable.
- 360° swivel hook.

Tapered drum spring balancer for production use. The tapered drum minimizes tension build-up as the cable is extended. Ideal for small assembly operations.

### Michigan Pneumatic

#### Heavy-Duty High Capacity Balancers

**Cast Aluminum Construction**
- Balance Range 33 - 154 lbs.
- 7/32" diameter steel cable.
- 360° swivel hook.

Designed for automobile assembly, meatpacking and steel manufacturing plants. The tapered drum minimizes tension build-up as the cable is extended.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Tension Range</th>
<th>Cable Travel</th>
<th>Min. Hook to Hook Dist.</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-SW-22</td>
<td>33.07-48.5 lbs.</td>
<td>4.9 ft.</td>
<td>16-5/8&quot;</td>
<td>15.9 lbs.</td>
</tr>
<tr>
<td>MP-SW-30</td>
<td>48.4-66 lbs.</td>
<td></td>
<td></td>
<td>16.7 lbs.</td>
</tr>
<tr>
<td>MP-SW-40</td>
<td>66-88 lbs.</td>
<td></td>
<td></td>
<td>21.5 lbs.</td>
</tr>
<tr>
<td>MP-SW-50</td>
<td>88-110 lbs.</td>
<td></td>
<td></td>
<td>22.8 lbs.</td>
</tr>
<tr>
<td>MP-SW-60</td>
<td>110-132 lbs.</td>
<td></td>
<td></td>
<td>25.5 lbs.</td>
</tr>
<tr>
<td>MP-SW-70</td>
<td>132-154 lbs.</td>
<td></td>
<td></td>
<td>25.9 lbs.</td>
</tr>
</tbody>
</table>

#### Heavy-Duty High Capacity Balancers

**Cast Aluminum Construction**
- Balance Range 33 - 154 lbs.
- 7/32" diameter steel cable.
- 360° swivel hook.

#### Auto Rewind Hose Reel

Lightweight, impact resistant polypropylene construction, UV stabilized for outside applications. Features a positive locking mechanism which enables hose to lock at any length. Can be installed at any position on a wall, ceiling or vehicle. Includes 50 ft. of 3/8” I.D. superflex outlet hose and 3 ft. of 3/8” I.D. inlet hose, heavy-duty mounting bracket and carrying handle.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Tension Range</th>
<th>Cable Travel</th>
<th>Min. Hook to Hook Dist.</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>15F</td>
<td>8-15 lbs.</td>
<td>8 ft.</td>
<td>15-1/4&quot;</td>
<td>8.8 lbs.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Tension Range</th>
<th>Cable Travel</th>
<th>Min. Hook to Hook Dist.</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-SW-9</td>
<td>9.9-19.8 lbs.</td>
<td>4.2 ft.</td>
<td>13-1/4&quot;</td>
<td>7.4 lbs.</td>
</tr>
<tr>
<td>MP-SW-15</td>
<td>19.8-33 lbs.</td>
<td></td>
<td></td>
<td>8.3 lbs.</td>
</tr>
</tbody>
</table>

#### Aero-Motive Model 15F

**Heavy-Duty Steel Balancer**
- Easy tension adjustment
- Durable 3/32" diameter stranded steel aircraft cable
- Long-lasting mainspring

Industrial model designed for repetitive assembly line work, steel manufacturing plants and machine shops.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Tension Range</th>
<th>Cable Travel</th>
<th>Min. Hook to Hook Dist.</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>15F</td>
<td>8-15 lbs.</td>
<td>8 ft.</td>
<td>15-1/4&quot;</td>
<td>8.8 lbs.</td>
</tr>
</tbody>
</table>
### Michigan Pneumatic

#### Industrial Quality “C” Clamps

**Spatter Resistant Deep Throat**

The extra deep throat allows maximum clearance for body builders, welders (weld spatter will not stick to the copper plated screw and swivel), wood workers and general machine shop workers. Drop forged and heat treated with a tough Acme thread for long life and durable performance.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Capacity</th>
<th>Throat Depth</th>
<th>Length</th>
<th>Width</th>
<th>Screw Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC402</td>
<td>2”</td>
<td>2”</td>
<td>6”</td>
<td>3-3/4”</td>
<td>1/2”</td>
</tr>
<tr>
<td>CC403</td>
<td>3”</td>
<td>2-1/2”</td>
<td>8”</td>
<td>4-1/4”</td>
<td>5/8”</td>
</tr>
<tr>
<td>CC404</td>
<td>4”</td>
<td>2-7/8”</td>
<td>10”</td>
<td>5”</td>
<td>3/4”</td>
</tr>
<tr>
<td>CC406</td>
<td>6”</td>
<td>3-5/8”</td>
<td>12”</td>
<td>6”</td>
<td>3/4”</td>
</tr>
<tr>
<td>CC408</td>
<td>8”</td>
<td>4-1/2”</td>
<td>14-1/2”</td>
<td>7”</td>
<td>3/4”</td>
</tr>
<tr>
<td>CC410</td>
<td>10”</td>
<td>5-3/8”</td>
<td>17-1/4”</td>
<td>8-1/2”</td>
<td>3/4”</td>
</tr>
<tr>
<td>CC412</td>
<td>12”</td>
<td>5-3/4”</td>
<td>20”</td>
<td>9-3/8”</td>
<td>7/8”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Capacity</th>
<th>Throat Depth</th>
<th>Length</th>
<th>Width</th>
<th>Screw Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC44</td>
<td>4”</td>
<td>1-3/4”</td>
<td>3/4”</td>
<td>11/16”</td>
<td>3-1/2”</td>
</tr>
<tr>
<td>FC46</td>
<td>6”</td>
<td>2”</td>
<td>7/8”</td>
<td>11/16”</td>
<td>5-1/2”</td>
</tr>
<tr>
<td>FC48</td>
<td>8”</td>
<td>2-1/8”</td>
<td>1-1/8”</td>
<td>13/16”</td>
<td>7-3/8”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Length</th>
<th>Width</th>
<th>Thickness</th>
<th>Slot Width</th>
<th>Slot Length</th>
<th>Offset</th>
<th>Approx. Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>UC-64</td>
<td>4”</td>
<td>1-3/4”</td>
<td>3/4”</td>
<td>11/16”</td>
<td>3-1/2”</td>
<td>-</td>
<td>1 lb.</td>
</tr>
<tr>
<td>UC-66</td>
<td>6”</td>
<td>2”</td>
<td>7/8”</td>
<td>11/16”</td>
<td>5-1/2”</td>
<td>-</td>
<td>2 lbs.</td>
</tr>
<tr>
<td>UC-68</td>
<td>8”</td>
<td>2-3/8”</td>
<td>1-1/8”</td>
<td>13/16”</td>
<td>7-3/8”</td>
<td>-</td>
<td>4 lbs.</td>
</tr>
<tr>
<td>UC-110</td>
<td>10”</td>
<td>2-3/4”</td>
<td>1-1/4”</td>
<td>15/16”</td>
<td>9”</td>
<td>-</td>
<td>6.5 lbs.</td>
</tr>
<tr>
<td>UC-112</td>
<td>12”</td>
<td>3-1/4”</td>
<td>1-3/8”</td>
<td>1-1/8”</td>
<td>11”</td>
<td>-</td>
<td>11 lbs.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Length</th>
<th>Width</th>
<th>Thickness</th>
<th>Slot Width</th>
<th>Slot Length</th>
<th>Offset</th>
<th>Approx. Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC-54</td>
<td>4”</td>
<td>1-5/8”</td>
<td>3/4”</td>
<td>11/16”</td>
<td>1-3/8”</td>
<td>-</td>
<td>1 lb.</td>
</tr>
<tr>
<td>PC-56</td>
<td>6”</td>
<td>1-3/4”</td>
<td>7/8”</td>
<td>11/16”</td>
<td>2-1/6”</td>
<td>-</td>
<td>1.75 lbs.</td>
</tr>
<tr>
<td>PC-58</td>
<td>8”</td>
<td>2-1/8”</td>
<td>1-1/8”</td>
<td>13/16”</td>
<td>2-13/16”</td>
<td>-</td>
<td>3.75 lbs.</td>
</tr>
<tr>
<td>PC-59</td>
<td>10”</td>
<td>2-1/2”</td>
<td>1-3/8”</td>
<td>15/16”</td>
<td>3-11/16”</td>
<td>-</td>
<td>7 lbs.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Length</th>
<th>Width</th>
<th>Thickness</th>
<th>Slot Width</th>
<th>Slot Length</th>
<th>Offset</th>
<th>Approx. Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>GC-74</td>
<td>4”</td>
<td>1-3/8”</td>
<td>3/4”</td>
<td>11/16”</td>
<td>15/16”</td>
<td>-</td>
<td>1 lb.</td>
</tr>
<tr>
<td>GC-76</td>
<td>6”</td>
<td>1-3/4”</td>
<td>7/8”</td>
<td>11/16”</td>
<td>1-11/16”</td>
<td>-</td>
<td>2 lbs.</td>
</tr>
<tr>
<td>GC-78</td>
<td>8”</td>
<td>2-1/8”</td>
<td>1-1/8”</td>
<td>13/16”</td>
<td>2-7/16”</td>
<td>-</td>
<td>4.25 lbs.</td>
</tr>
</tbody>
</table>
Miscellaneous Tools

Wilton® Heavy-Duty Vises
Rugged, dependable, economically priced general purpose vises. Features locking swivel base, replaceable jaws, fabricated steel construction, built-in anvil with horn and pipe jaws.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Jaw Width</th>
<th>Jaw Opening</th>
<th>Throat Depth</th>
<th>Pipe Jaw</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>600674</td>
<td>4-1/2&quot;</td>
<td>4&quot;</td>
<td>2-5/8&quot;</td>
<td>1/8&quot; to 2&quot;</td>
<td>19.40 lbs.</td>
</tr>
<tr>
<td>600675</td>
<td>5-1/2&quot;</td>
<td>5&quot;</td>
<td>3-5/16&quot;</td>
<td>1/8&quot; to 2-1/2&quot;</td>
<td>29.20 lbs.</td>
</tr>
<tr>
<td>600676</td>
<td>6-1/2&quot;</td>
<td>6&quot;</td>
<td>3-13/16&quot;</td>
<td>1/8&quot; to 2-1/2&quot;</td>
<td>41.85 lbs.</td>
</tr>
<tr>
<td>600658HD</td>
<td>6&quot;</td>
<td>7-1/2&quot;</td>
<td>4-1/2&quot;</td>
<td>1/8&quot; to 3&quot;</td>
<td>64.10 lbs.</td>
</tr>
<tr>
<td>600648HD</td>
<td>8&quot;</td>
<td></td>
<td></td>
<td></td>
<td>86.20 lbs.</td>
</tr>
</tbody>
</table>

JET Toe & Screw Jacks

Screw Jacks

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Rated Capacity</th>
<th>Screw Size</th>
<th>Base Size</th>
<th>Closed Height</th>
<th>Extended Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>SJ-5T</td>
<td>5 ton</td>
<td>1&quot; x 6&quot;</td>
<td>4-1/2&quot;</td>
<td>9&quot;</td>
<td>13&quot;</td>
</tr>
<tr>
<td>SJ-10T</td>
<td>10 ton</td>
<td>1-1/2&quot; x 8-3/8*</td>
<td>5-1/4&quot;</td>
<td>11&quot;</td>
<td>17-1/2&quot;</td>
</tr>
<tr>
<td>SJ-15T</td>
<td>15 ton</td>
<td>1-5/8&quot; x 10-1/2&quot;</td>
<td>6&quot;</td>
<td>13-3/4&quot;</td>
<td>21&quot;</td>
</tr>
<tr>
<td>SJ-20T</td>
<td>20 ton</td>
<td>2&quot; x 12&quot;</td>
<td>6-7/8&quot;</td>
<td>16&quot;</td>
<td>25&quot;</td>
</tr>
<tr>
<td>SJ-25T</td>
<td>25 ton</td>
<td>2-1/2&quot; x 12&quot;</td>
<td>8&quot;</td>
<td>16-1/2&quot;</td>
<td>25-1/4&quot;</td>
</tr>
</tbody>
</table>

Turning Bars

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Size</th>
<th>Fits Jack</th>
</tr>
</thead>
<tbody>
<tr>
<td>440301</td>
<td>1/2&quot; x 18&quot;</td>
<td>SJ-5T</td>
</tr>
<tr>
<td>440302</td>
<td>5/8&quot; x 24&quot;</td>
<td>SJ-10T</td>
</tr>
<tr>
<td>440303</td>
<td>3/4&quot; x 36&quot;</td>
<td>SJ-15T to SJ-25T</td>
</tr>
<tr>
<td>440304</td>
<td>3/4&quot; x 42&quot;</td>
<td>SJ-15T to SJ-25T</td>
</tr>
</tbody>
</table>

Michigan Pneumatic Model MC-114
High Frequency Vibrator
For Molding/Core Machines and Foundries
Heavy-duty vibrator cast from ductile iron and precision machined to provide a long service life under the most adverse foundry conditions. Ideal for all production and automotive foundries. Other models available.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Jaw Width</th>
<th>Jaw Opening</th>
<th>Throat Depth</th>
<th>Pipe Jaw</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>600674</td>
<td>4-1/2&quot;</td>
<td>4&quot;</td>
<td>2-5/8&quot;</td>
<td>1/8&quot; to 2&quot;</td>
<td>19.40 lbs.</td>
</tr>
<tr>
<td>600675</td>
<td>5-1/2&quot;</td>
<td>5&quot;</td>
<td>3-5/16&quot;</td>
<td>1/8&quot; to 2-1/2&quot;</td>
<td>29.20 lbs.</td>
</tr>
<tr>
<td>600676</td>
<td>6-1/2&quot;</td>
<td>6&quot;</td>
<td>3-13/16&quot;</td>
<td>1/8&quot; to 2-1/2&quot;</td>
<td>41.85 lbs.</td>
</tr>
<tr>
<td>600658HD</td>
<td>6&quot;</td>
<td>7-1/2&quot;</td>
<td>4-1/2&quot;</td>
<td>1/8&quot; to 3&quot;</td>
<td>64.10 lbs.</td>
</tr>
<tr>
<td>600648HD</td>
<td>8&quot;</td>
<td></td>
<td></td>
<td></td>
<td>86.20 lbs.</td>
</tr>
</tbody>
</table>

Michigan Pneumatic Model APGG1
Air Operated Grease Gun
One handed grease gun delivers 1500 to 9000 psi each time the trigger is pressed. Loads three ways and has E-Z air vent cap. Equipped with 1/4" NPT fitting.

Michigan Pneumatic Model MP-290-ST
Air Caulking Gun
Produces a constant flow for an even bead. Ideal for construction and automotive applications.

<table>
<thead>
<tr>
<th>Max. Air Pressure</th>
<th>70 psi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Inlet Thread</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Tube Size</td>
<td>2&quot; dia. x 8-1/2&quot; lg.</td>
</tr>
</tbody>
</table>

Chicago Pneumatic Model CP-718
Car Shaker/Vibrator
Quickly locates all interior and exterior squeaks and rattles. Includes 28 ft. air supply and extension hose, frequency control regulator and 8 ft. exhaust hose with muffler.

<table>
<thead>
<tr>
<th>Recommended Air Pressure</th>
<th>100-145 psi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vibrations Per Minute</td>
<td>300-1400</td>
</tr>
<tr>
<td>Cylinder Weight</td>
<td>15 lbs.</td>
</tr>
<tr>
<td>Hose Size</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>Average Air Consumption</td>
<td>3 cfm</td>
</tr>
</tbody>
</table>
Air Line Accessories

Michigan Pneumatic Mini-Lube Portable Lubricator
Model 100250 - 1/4" Air Flow 5-15 cfm

Michigan Pneumatic Midget-Lube Portable Lubricator
Model 300250 - 1/4" Air Flow 8-20 cfm
Model 300375 - 3/8" Air Flow 10-30 cfm

Michigan Pneumatic Master-Lube Portable Lubricator
Model 400250 - 1/4" Air Flow 8-20 cfm
Model 400375 - 3/8" Air Flow 10-40 cfm
Model 400500 - 1/2" Air Flow 25-65 cfm

Weight.................................................. 2.5 oz.
Length.................................................. 2-1/2" 
Maximum O.D...................................... 1-3/16" 
Pipe Size............................................. 1/4" 
Oil Capacity.................................. 9 cc 

Weight.................................................. 3.5 oz.
Length.................................................. 2-1/2" 
Maximum O.D...................................... 1-1/4" 
Pipe Sizes........................................... 1/4", 3/8" 
Oil Capacity.................................. 9 cc

Weight.................................................. 5 oz.
Length.................................................. 3-1/4" 
Maximum O.D...................................... 1-5/8" 
Pipe Sizes........................................... 1/4", 3/8" & 1/2" 
Oil Capacity.................................. 22 cc

Air Tool Inlet Regulators
Ideal for restricting the air flow to tools not equipped with built-in regulators. Model 894 CP style regulator features brass construction and a spring loaded ratchet, which prevents unintentional setting changes.

- Easy to install, easy to use.
- Provides precise regulation of air.

Model 894 1/4" NPT
Model 5711 1/4" NPT
Model 038-0.375 3/8" NPT
Model 038-0.500 1/2" NPT

Regulator Pressure Gauge
- Quality air gauge designed for use with any air tool.
- Metal case with glass lens.

Model PG1 1/8" MPT, back mount, 0-160 psi, 1-1/2" dial
Model PG2 1/4" MPT, back mount, 0-200 psi, 2" dial
Model PG3 1/4" MPT, bottom mount, 0-160 psi, 2" dial

Other sizes and pressure ranges available.

Safety Excess Flow Check Valve
- OSHA approved.
- Tamper proof construction.
- Allows full, unrestricted airflow.
- Automatically shuts off air flow in case of sudden air line break protecting personnel and property.
- Automatic reset after line repair.

Model No. Inlet Size Outlet Size
SV802 1/4" FPT 1/4" FPT
SV803 3/8" FPT 3/8" FPT
SV804 1/2" FPT 1/2" FPT
SV200F-85 2-1/4" FPT 2-1/4" FPT
SV806 3/4" MPT 3/4" FPT
SV808 1" MPT 1" FPT

Air Line Pressure Gauge
- For constant reading of line pressure.
- 1/4" male bottom connection.
- Large indicator dial.
- Chrome plated case.

Model No. Range Dial Size
GB14100 0-100 psi 2"
GB14160 0-160 psi
GB14200 0-200 psi
GB14300 0-300 psi
GB16160 0-160 psi
GB16200 0-200 psi
GB16300 0-300 psi
GB17600 0-600 psi 3-1/2"

Other sizes and pressure ranges available.

Full Flow Brass Ball Valve
For control of air, water and oil in hoses or pipelines up to 400 psi. Features a brass valve body, brass stems, stainless steel ball and die cast aluminum handle with a vinyl sleeve. Equipped with female threaded ends and full port design.

Model No. Pipe Size
21104 1/4"
21106 3/8"
21108 1/2"
21112 3/4"
21116 1"
21120 1-1/4"
Filters, Regulators & Lubricators

**Michigan Pneumatic**

**Miniature Assemblies - with Gauge**

MPT miniature assemblies include a filter, regulator, lubricator and gauge. Ideal where space is at a premium and a must for maximum protection of air operated equipment. Filters feature a 5 micron sintered plastic element.

- F50-1 1/8" Filter
- F50-2 1/4" Filter
- R55-1 1/8" Regulator
- R55-1G 1/8" Regulator & Gauge
- R55-2 1/4" Regulator
- R55-2G 1/4" Regulator & Gauge
- L50-1 1/8" Lubricator
- L50-2 1/4" Lubricator

**Complete Assemblies**

MPT trio assemblies include a filter, regulator, lubricator and gauge. An efficient, compact and permanent control assembly specially designed to provide maximum protection for air operated equipment, allowing tools to produce at peak operating efficiency. *High Capacity.*

**Filters - with Automatic Drain**

MPT airline filters with automatic drain automatically discharge water and contaminants from a filter for maximum protection of air operated equipment. Eliminates filter overflow. Other sizes available up to 2". Features a 5 micron sintered plastic element. *High Capacity.*

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Pipe Size</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>F100-2</td>
<td>1/4&quot;</td>
<td>8 oz.</td>
</tr>
<tr>
<td>F100-3</td>
<td>3/8&quot;</td>
<td>8 oz.</td>
</tr>
<tr>
<td>F100-4</td>
<td>1/2&quot;</td>
<td>8 oz.</td>
</tr>
<tr>
<td>F100-6*</td>
<td>3/4&quot;</td>
<td>16 oz.</td>
</tr>
<tr>
<td>F100-8*</td>
<td>1&quot;</td>
<td>16 oz.</td>
</tr>
</tbody>
</table>

**Regulators**

MPT regulators reduce high primary air pressure to a secondary air pressure of 0-200 psi. This simple, accurate pressure reduction device provides stable air pressure within a recommended range for maximum operating efficiency. Ideal for controlling the speed and power of air equipment. To order with gauge, please specify “G” after the part number. *High Capacity.*

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Pipe Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>R100-2</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>R100-3</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>R100-4</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>R100-6</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>R180M-8*</td>
<td>1&quot;</td>
</tr>
</tbody>
</table>

**Lubricators**

MPT lubricators automatically introduce an oil mist into the compressed air stream. Oil lubricates all precision working parts of air operated equipment, eliminating wear and allowing tools to produce at peak operating efficiency with a minimum of unscheduled downtime. Works with pipe scale, water and sludge in the bowl. L28W features external oil adjustment. *High Capacity.*

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Pipe Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>F28-2</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>F28-3</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>F28-4</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>F28-6*</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>F28-8*</td>
<td>1&quot;</td>
</tr>
</tbody>
</table>

For best results, mount accessories as close to the tool as possible. Made in the U.S.A.
Air Line Lubricators

Portable Air Line Lubricators

Designed to supply oil to air tools where it is not practical to use stationary lubricators. Can be installed as far away as 25 feet. Oil flows into the line each time the tool is started. Easy and inexpensive way to keep air tools operating at peak efficiency. Features adjustable oil flow, visible oil supply and rugged casting for use in severe conditions.

In-line filters designed to screw directly into the lubricators available on page 155.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Pressure Relief Cap</th>
</tr>
</thead>
<tbody>
<tr>
<td>TX-02000PR</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TXLRK</th>
<th>Repair Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Model 0-R**
Lubricator with optional pressure release cap

---

**In-line Lubricator w/ Integral Filter**

```
<table>
<thead>
<tr>
<th>Model No.</th>
<th>Oil Capacity</th>
<th>Pipe Size</th>
<th>Rec’d Air Flow @ 70 PSI</th>
<th>Max. PSI</th>
<th>Length</th>
<th>Height</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-R</td>
<td>1.4 oz.</td>
<td>1/2&quot;</td>
<td>30 cfm</td>
<td>500</td>
<td>4-1/2&quot;</td>
<td>2-1/4&quot;</td>
<td>0.88 lbs.</td>
</tr>
<tr>
<td>1-R</td>
<td>3.7 oz.</td>
<td>3/4&quot;</td>
<td>70 cfm</td>
<td>260</td>
<td>6&quot;</td>
<td>2-3/4&quot;</td>
<td>1.50 lbs.</td>
</tr>
<tr>
<td>2-R</td>
<td>11.0 oz.</td>
<td>3/4&quot;</td>
<td>70 cfm</td>
<td>300</td>
<td>7&quot;</td>
<td>3-1/2&quot;</td>
<td>2.00 lbs.</td>
</tr>
<tr>
<td>2A-R</td>
<td>11.0 oz.</td>
<td>1&quot;</td>
<td>70 cfm</td>
<td>300</td>
<td>7&quot;</td>
<td>3-1/2&quot;</td>
<td>2.00 lbs.</td>
</tr>
<tr>
<td>3-R</td>
<td>16.0 oz.</td>
<td>1&quot;</td>
<td>150 cfm</td>
<td>250</td>
<td>10&quot;</td>
<td>3-3/4&quot;</td>
<td>4.25 lbs.</td>
</tr>
</tbody>
</table>
```

---

**Safety Lock Cables**

Helps prevent injury due to broken hose connections. Spring-powered loops provide a firm grip on the hose. **Bleed air pressure from hose before removing safety lock cable.**

```
<table>
<thead>
<tr>
<th>Model No.</th>
<th>Cable Description (Dia. x L)</th>
<th>Fits Hose OD</th>
</tr>
</thead>
<tbody>
<tr>
<td>TX-SLC1</td>
<td>1/8&quot; x 20&quot;</td>
<td>1/2&quot; to 1-1/4&quot;</td>
</tr>
<tr>
<td>TX-SLC2</td>
<td>1/4&quot; x 38&quot;</td>
<td>1-1/2&quot; to 3&quot;</td>
</tr>
</tbody>
</table>
```

---

**Lubricator Whip Hose Assemblies**

**Model TX-1L-F**

**Model TX-1L-F**

**Model MP-3HW**

**Model MP-4HW**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Oil Capacity</th>
<th>Pipe Size</th>
<th>Rec’d Air Flow @ 70 PSI</th>
<th>Max. PSI</th>
<th>Height</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>TX-0L-F</td>
<td>1.4 oz.</td>
<td>1/2&quot;</td>
<td>30 cfm</td>
<td>500</td>
<td>2-1/4&quot;</td>
<td>0.88 lbs.</td>
</tr>
<tr>
<td>TX-1L-F</td>
<td>3.7 oz.</td>
<td>3/4&quot;</td>
<td>70 cfm</td>
<td>260</td>
<td>2-3/4&quot;</td>
<td>1.50 lbs.</td>
</tr>
</tbody>
</table>

---

**Assembly Components**

```
<table>
<thead>
<tr>
<th>Model No.</th>
<th>Fitting to Tool</th>
<th>Hose</th>
<th>Lubricator</th>
<th>Air Flow @ 70 psi</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-1HW</td>
<td>1/4&quot; MPT</td>
<td></td>
<td>0-R</td>
<td>30 cfm</td>
</tr>
<tr>
<td>MP-2HW</td>
<td>3/8&quot; MPT</td>
<td></td>
<td>0-R</td>
<td>30 cfm</td>
</tr>
<tr>
<td>MP-3HW</td>
<td>1/2&quot; MPT</td>
<td></td>
<td>0-R</td>
<td>30 cfm</td>
</tr>
<tr>
<td>MP-4HW</td>
<td>L-1 swivel (7/8&quot;-24 thread)</td>
<td>1/2&quot;ID x 6 ft.</td>
<td>0-R</td>
<td>30 cfm</td>
</tr>
<tr>
<td>MP-4HW-0.500</td>
<td>L-3 swivel (1/2&quot; MPT)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
```

Additional lubricator whip hose assemblies available.
Air Inlet Hose Swivels

For use on all chipping hammers and rivet busters. Designed to eliminate hose kinking or twisting for greater operator efficiency.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Fitting to Tool</th>
<th>Hose Connection</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>L-1</td>
<td>7/8&quot;-24 thread</td>
<td>1/2&quot; hose barb</td>
<td>Swivel Only</td>
</tr>
<tr>
<td>L-2</td>
<td></td>
<td>3/8&quot; MPT</td>
<td></td>
</tr>
<tr>
<td>L-4</td>
<td></td>
<td>1/2&quot; MPT</td>
<td></td>
</tr>
<tr>
<td>L-5</td>
<td>3/8&quot; MPT</td>
<td>1/2&quot; hose barb</td>
<td></td>
</tr>
<tr>
<td>L-3</td>
<td>1/2&quot; MPT</td>
<td>1/2&quot; hose barb</td>
<td></td>
</tr>
<tr>
<td>L-8</td>
<td>3/4&quot; MPT</td>
<td>1/2&quot; MPT</td>
<td></td>
</tr>
<tr>
<td>L-1-Whip</td>
<td>7/8&quot;-24 thread</td>
<td>1/2&quot; hose barb</td>
<td></td>
</tr>
<tr>
<td>L-5-Whip</td>
<td>3/8&quot; MPT</td>
<td>1/2&quot; hose barb</td>
<td></td>
</tr>
<tr>
<td>L-3-Whip</td>
<td>3/8&quot; MPT</td>
<td>1/2&quot; hose barb</td>
<td></td>
</tr>
<tr>
<td>L-8-Whip</td>
<td>1/2&quot; MPT</td>
<td>1/2&quot; hose barb</td>
<td></td>
</tr>
</tbody>
</table>

360° Swivels

Bi-directional 360° rotation universal joint keeps air hoses straight and untwisted. Increases the maneuverability of air tools and decreases operator fatigue.

360° Swivels

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989</td>
<td>1/4&quot; MPT x 1/4&quot; FPT</td>
</tr>
<tr>
<td>1990</td>
<td>1/4&quot; MPT x 3/8&quot; FPT</td>
</tr>
<tr>
<td>1991</td>
<td>3/8&quot; MPT x 1/4&quot; FPT</td>
</tr>
<tr>
<td>1992</td>
<td>3/8&quot; MPT x 3/8&quot; FPT</td>
</tr>
<tr>
<td>1993</td>
<td>3/8&quot; MPT x 1/2&quot; FPT</td>
</tr>
<tr>
<td>1994</td>
<td>1/2&quot; MPT x 3/8&quot; FPT</td>
</tr>
<tr>
<td>1995</td>
<td>1/2&quot; MPT x 1/2&quot; FPT</td>
</tr>
</tbody>
</table>

Screened Inlet Bushings

Keeps rust and other air line debris from contaminating your tools. Manufactured from solid steel with brass screens pressed into the bushing.

In-Line Air Filters

Protects air tools from rust, scale and dirt. Reduces expensive repairs and prolongs tool life. Designed for installation on air line at the point of use. Features a 40 micron sintered bronze filter element.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Inlet Size</th>
<th>Outlet Size</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>9072</td>
<td>1/4&quot; FPT</td>
<td>1/4&quot; MPT</td>
<td>2-5/16&quot;</td>
</tr>
<tr>
<td>9073</td>
<td>3/8&quot; FPT</td>
<td>3/8&quot; MPT</td>
<td>2-5/16&quot;</td>
</tr>
<tr>
<td>9074M</td>
<td>1/2&quot; FPT</td>
<td>1/2&quot; MPT</td>
<td>3-1/4&quot;</td>
</tr>
<tr>
<td>9076M</td>
<td>3/4&quot; FPT</td>
<td>3/4&quot; MPT</td>
<td>3-1/4&quot;</td>
</tr>
<tr>
<td>9074</td>
<td>1/2&quot; FPT</td>
<td>1/2&quot; FPT</td>
<td>3-1/4&quot;</td>
</tr>
<tr>
<td>9076</td>
<td>3/4&quot; FPT</td>
<td>3/4&quot; FPT</td>
<td>3-1/4&quot;</td>
</tr>
<tr>
<td>9074</td>
<td>1/2&quot; FPT</td>
<td>1/2&quot; FPT</td>
<td></td>
</tr>
<tr>
<td>9076</td>
<td>3/4&quot; FPT</td>
<td>3/4&quot; FPT</td>
<td></td>
</tr>
</tbody>
</table>

In-line Manifolds

• Supply up to 6 air hoses from one station, using up to 6 different style couplers
• Mount to workbench or wall
• Permits use of air by more than one mechanic

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Inlet Size</th>
<th>Outlet Size</th>
<th>No. of Ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>D3404</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>3</td>
</tr>
<tr>
<td>D3406</td>
<td>3/8&quot;</td>
<td>1/4&quot;</td>
<td>4</td>
</tr>
<tr>
<td>D3408</td>
<td>1/2&quot;</td>
<td>1/4&quot;</td>
<td>6</td>
</tr>
<tr>
<td>3043</td>
<td>3/8&quot;</td>
<td>1/4&quot;</td>
<td></td>
</tr>
<tr>
<td>3063</td>
<td>3/8&quot;</td>
<td>1/4&quot;</td>
<td></td>
</tr>
</tbody>
</table>

Marvel

Air Tool Oil

A specially formulated high grade lubricating oil for all piston and rotary-type air tools. Lubricates and rust proofs for longer tool life.

<table>
<thead>
<tr>
<th>OIL-080</th>
<th>4 Ounce</th>
</tr>
</thead>
<tbody>
<tr>
<td>OIL-085</td>
<td>1 Quart</td>
</tr>
</tbody>
</table>

Winter Grade Oil with De-Icing Additive

Designed for extreme weather conditions down to -45° F. Eliminates freezing while lubricating tools. Can be used in conventional air line lubricators or applied directly into the tools air inlet.

• Convenient “flip up” pour top (4 oz. and pint bottles only)

<table>
<thead>
<tr>
<th>ATL004W</th>
<th>4 Ounce</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATL016W</td>
<td>1 Pint</td>
</tr>
<tr>
<td>ATL128W</td>
<td>1 Gallon</td>
</tr>
</tbody>
</table>
Michigan Pneumatic

Air Manifolds

Keep the work site uncluttered by using only one hose to power up to eight tools at once. Equipped with a gauge to monitor working pressure and a 200 psi pop-off valve to prevent excessive pressure build-up. Easily bolts to skids or other surfaces and multiple manifolds can be used in tandem.

**AM23 1-1/2" 4-Lug Universal Coupling**

---

### Michigan Pneumatic

**Model MP-1AMF**

**Radial Air Manifold**

Used in any industry with a need for multiple outlets of air to supply various pneumatic tools simultaneously. **The 1-1/2" inlet can be dispersed through up to six separate outlets using 3/4" CP couplings.** Each outlet is regulated by a bronze safety lock ball valve. Features a pressure relief valve for protection against excessive pressure and filters for clean air.

**AM23 1-1/2" 4-Lug Universal Coupling**

**Dimensions:**
- Diameter: 36"
- Height: 15"
- Weight: 102 lbs.
- Air Inlet: 1-1/2"

---

### Michigan Pneumatic

**Model MP-6-PAK**

**Radial Air Manifold - with Moisture Separator**

Used in any industry with a need for multiple air outlets to supply various pneumatic tools simultaneously. **The 1-1/2" inlet can be dispersed through up to six separate outlets using 3/4" CP couplings.** Each has a manual shut-off valve and moisture separator with auto drain valve, increasing tool life. Rugged steel tubular design, with tabs, can be rolled to the job site and allows unit to be lifted and stacked.

**AM23 1-1/2" 4-Lug Universal Coupling**

**Dimensions:**
- Diameter: 36"
- Height: 18"
- Weight: 175 lbs.
- Air Inlet: 1-1/2"
Air Hose & Accessories

**Self-Storing Coiled Nylon Air Hose**
- Rugged construction
- Extends and retracts like a telephone cord
- Improves safety and efficiency
- Saves space
- Oil and abrasion resistant
- Lightweight
- 200 psi working pressure
- Reusable male fittings

<table>
<thead>
<tr>
<th>1/4&quot; Coiled Hose</th>
<th>3/8&quot; Coiled Hose</th>
<th>1/2&quot; Coiled Hose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model No.</td>
<td>Length</td>
<td>Storage Length</td>
</tr>
<tr>
<td>N14-12B</td>
<td>12 ft.</td>
<td>5&quot;</td>
</tr>
<tr>
<td>N14-50B</td>
<td>50 ft.</td>
<td>20&quot;</td>
</tr>
</tbody>
</table>

**Industrial Grade Air Hose** - with Fittings
- Maximum pressure 200 psi to 250 psi
- Heavy-duty double strand
- High tensile rayon cord
- Braided body
- Tough neoprene
- Oil resistant

<table>
<thead>
<tr>
<th>Industrial Whip Hose** - with Fittings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>WH-2</td>
</tr>
<tr>
<td>WH-4</td>
</tr>
<tr>
<td>WH-6</td>
</tr>
<tr>
<td>WH-7</td>
</tr>
<tr>
<td>WH-8</td>
</tr>
<tr>
<td>WH-9</td>
</tr>
<tr>
<td>WH-94</td>
</tr>
<tr>
<td>WH-10</td>
</tr>
<tr>
<td>WH-11</td>
</tr>
<tr>
<td>WH-12</td>
</tr>
<tr>
<td>WH-13</td>
</tr>
<tr>
<td>WH-14</td>
</tr>
</tbody>
</table>

**Neoprene Swivel Pigtail Assemblies**
with Female Fitting and Male Swivel

<table>
<thead>
<tr>
<th>Neoprene Swivel Pigtail Assemblies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model No.</td>
</tr>
<tr>
<td>RP0418S</td>
</tr>
<tr>
<td>RP0436S</td>
</tr>
<tr>
<td>RP0618S</td>
</tr>
<tr>
<td>RP0624S</td>
</tr>
<tr>
<td>RP0636S</td>
</tr>
</tbody>
</table>

**Stainless Worm Gear Hose Clamps**

<table>
<thead>
<tr>
<th>Stainless Worm Gear Hose Clamps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model No.</td>
</tr>
<tr>
<td>HS6</td>
</tr>
<tr>
<td>HS8</td>
</tr>
<tr>
<td>HS10</td>
</tr>
<tr>
<td>HS12</td>
</tr>
<tr>
<td>HS16</td>
</tr>
<tr>
<td>HS20</td>
</tr>
<tr>
<td>HS24</td>
</tr>
<tr>
<td>HS28</td>
</tr>
<tr>
<td>HS32</td>
</tr>
</tbody>
</table>

**K-Series Band Clamps & Tools**

<table>
<thead>
<tr>
<th>K-Series Band Clamp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>HS6</td>
</tr>
<tr>
<td>HS8</td>
</tr>
<tr>
<td>HS10</td>
</tr>
<tr>
<td>HS12</td>
</tr>
<tr>
<td>HS16</td>
</tr>
<tr>
<td>HS20</td>
</tr>
<tr>
<td>HS24</td>
</tr>
<tr>
<td>HS28</td>
</tr>
<tr>
<td>HS32</td>
</tr>
<tr>
<td>K11-CLAMP</td>
</tr>
<tr>
<td>K12-CLAMP</td>
</tr>
</tbody>
</table>

F-Series center punch clamps also available.
**Industrial Couplers & Connectors**

**Proper Selection Guidelines**

1/4" Series: Recommended for tools requiring up to **25 cfm** of air, such as small drills, screwdrivers and air hammers using a 1/4" and 3/8" air hose.

3/8" Series: Recommended for tools requiring up to **50 cfm** of air, such as drills up to 1/2", impact wrenches 3/8" to 5/8", and die grinders and chipping hammers using a 3/8" hose.

1/2" Series: Recommended for tools requiring up to **90 cfm** of air, such as drills up to 1-1/4", impact wrenches 3/4" to 1-1/4", grinders 4" to 8", and heavy chipping and riveting hammers using a 1/2" hose.

Foster industrial couplers feature the standard industrial interchange design most widely used in industry. Please specify the same series size couplers and plugs when ordering. Plugs of one series size will not fit couplers of another size. Other types and styles of couplers and connectors are available.

### Quick Change Couplers with Male Pipe Thread

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Series</th>
<th>Thread Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>2903</td>
<td>1/4&quot;</td>
<td>1/8&quot; MPT</td>
</tr>
<tr>
<td>3103</td>
<td>1/4&quot;</td>
<td>1/4&quot; MPT</td>
</tr>
<tr>
<td>3303</td>
<td>1/4&quot;</td>
<td>3/8&quot; MPT</td>
</tr>
<tr>
<td>4104</td>
<td>3/8&quot;</td>
<td>1/4&quot; MPT</td>
</tr>
<tr>
<td>4304</td>
<td>3/8&quot;</td>
<td>3/8&quot; MPT</td>
</tr>
<tr>
<td>4504</td>
<td>3/8&quot;</td>
<td>1/2&quot; MPT</td>
</tr>
<tr>
<td>5105</td>
<td>1/2&quot;</td>
<td>3/8&quot; MPT</td>
</tr>
<tr>
<td>5305</td>
<td>1/2&quot;</td>
<td>1/2&quot; MPT</td>
</tr>
<tr>
<td>5505</td>
<td>1/2&quot;</td>
<td>3/4&quot; MPT</td>
</tr>
</tbody>
</table>

### Quick Change Plugs with Male Pipe Thread

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Series</th>
<th>Thread Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-3</td>
<td>1/4&quot;</td>
<td>1/8&quot; MPT</td>
</tr>
<tr>
<td>10-3</td>
<td>1/4&quot;</td>
<td>3/8&quot; MPT</td>
</tr>
<tr>
<td>14-3</td>
<td>1/4&quot;</td>
<td>1/4&quot; MPT</td>
</tr>
<tr>
<td>40-4</td>
<td>3/8&quot;</td>
<td>1/2&quot; MPT</td>
</tr>
<tr>
<td>42-4</td>
<td>3/8&quot;</td>
<td>3/8&quot; MPT</td>
</tr>
<tr>
<td>44-4</td>
<td>3/8&quot;</td>
<td>1/4&quot; MPT</td>
</tr>
<tr>
<td>52-5</td>
<td>1/2&quot;</td>
<td>3/8&quot; MPT</td>
</tr>
<tr>
<td>54-5</td>
<td>1/2&quot;</td>
<td>1/2&quot; MPT</td>
</tr>
<tr>
<td>56-5</td>
<td>1/2&quot;</td>
<td>3/4&quot; MPT</td>
</tr>
</tbody>
</table>

### Quick Change Couplers with Hose Stem

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Series</th>
<th>Hose I.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3603</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>3703</td>
<td>1/4&quot;</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>4604</td>
<td>3/8&quot;</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>4804</td>
<td>3/8&quot;</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>4904</td>
<td>3/8&quot;</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>5705</td>
<td>1/2&quot;</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>5805</td>
<td>1/2&quot;</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>5905</td>
<td>1/2&quot;</td>
<td>3/4&quot;</td>
</tr>
</tbody>
</table>

### Quick Change Plugs with Female Pipe Thread

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Series</th>
<th>Thread Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-3</td>
<td>1/4&quot;</td>
<td>1/8&quot; FPT</td>
</tr>
<tr>
<td>11-3</td>
<td>1/4&quot;</td>
<td>1/4&quot; FPT</td>
</tr>
<tr>
<td>15-3</td>
<td>1/4&quot;</td>
<td>3/8&quot; FPT</td>
</tr>
<tr>
<td>41-4</td>
<td>3/8&quot;</td>
<td>1/2&quot; FPT</td>
</tr>
<tr>
<td>43-4</td>
<td>3/8&quot;</td>
<td>3/8&quot; FPT</td>
</tr>
<tr>
<td>45-4</td>
<td>3/8&quot;</td>
<td>1/2&quot; FPT</td>
</tr>
<tr>
<td>53-5</td>
<td>1/2&quot;</td>
<td>3/8&quot; FPT</td>
</tr>
<tr>
<td>55-5</td>
<td>1/2&quot;</td>
<td>1/2&quot; FPT</td>
</tr>
<tr>
<td>57-5</td>
<td>1/2&quot;</td>
<td>3/4&quot; FPT</td>
</tr>
</tbody>
</table>

### Quick Change Couplers with Hose Stem

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Series</th>
<th>Hose I.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-3</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>17-3</td>
<td>1/4&quot;</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>46-4</td>
<td>3/8&quot;</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>48-4</td>
<td>3/8&quot;</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>49-4</td>
<td>3/8&quot;</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>59-5</td>
<td>1/2&quot;</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>60-5</td>
<td>1/2&quot;</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>61-5</td>
<td>1/2&quot;</td>
<td>3/4&quot;</td>
</tr>
</tbody>
</table>

### Barbed Hose Stems Brass

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Thread Size</th>
<th>Hose I.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>M-3</td>
<td>1/8&quot; MPT</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>M-4</td>
<td>1/8&quot; MPT</td>
<td>5/16&quot;</td>
</tr>
<tr>
<td>M-5</td>
<td>1/8&quot; MPT</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>M-6</td>
<td>1/4&quot; MPT</td>
<td>3/16&quot;</td>
</tr>
<tr>
<td>M-7</td>
<td>1/4&quot; MPT</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>M-8</td>
<td>1/4&quot; MPT</td>
<td>5/16&quot;</td>
</tr>
<tr>
<td>M-9</td>
<td>1/4&quot; MPT</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>M-11</td>
<td>1/4&quot; MPT</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>M-12</td>
<td>3/8&quot; MPT</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>M-13</td>
<td>3/8&quot; MPT</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>M-14</td>
<td>3/8&quot; MPT</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>M-15</td>
<td>3/8&quot; MPT</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>M-16</td>
<td>1/2&quot; MPT</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>M-17</td>
<td>1/2&quot; MPT</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>M-19</td>
<td>1/2&quot; MPT</td>
<td>3/4&quot;</td>
</tr>
</tbody>
</table>

### Barbed Hose Stems Steel

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Thread Size</th>
<th>Hose I.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3501</td>
<td>1/8&quot; MPT</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>3502</td>
<td>1/4&quot; MPT</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>3503</td>
<td>1/8&quot; MPT</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>3504</td>
<td>3/8&quot; MPT</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>3505</td>
<td>1/4&quot; MPT</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>3506</td>
<td>3/8&quot; MPT</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>3508</td>
<td>1/2&quot; MPT</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>3509</td>
<td>1/4&quot; MPT</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>3510</td>
<td>3/8&quot; MPT</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>3511</td>
<td>3/4&quot; MPT</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>3512</td>
<td>1/2&quot; MPT</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>3513</td>
<td>1/2&quot; MPT</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>3514</td>
<td>3/4&quot; MPT</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>3518</td>
<td>1&quot; MPT</td>
<td>1&quot;</td>
</tr>
</tbody>
</table>

Can be used in conjunction with Dixon universal coupling hose clamps.

Made in the U.S.A.
## Air Hose Couplings & Fittings

### Universal Couplings
- **Male Thread**
  - **Model No.** | **Male Thread**
  - UM-25-M | 1/4"
  - UM-37-M | 3/8"
  - UM-50-M | 1/2"
  - UM-75-M | 3/4"
  - UM-100-M | 1"

- **Female Thread**
  - **Model No.** | **Female Thread**
  - UF-25-M | 1/4"
  - UF-37-M | 3/8"
  - UF-50-M | 1/2"
  - UF-75-M | 3/4"
  - UF-100-M | 1"

### Universal Coupling Accessories
- AC1 | Safety Lock Clip
- AWR-4 | Rubber Gasket for Universal Coupling
- UD-301-M | Universal “Dead-End” Coupling
- UW-300-M | Universal 3-Way Coupling

### Universal Coupling
- **Hose Clamps**
  - **Model No.** | **Hose I.D.** | **For Hose O.D.**
  - CD | 3/8" | 1/16" to 7/8"
  - B5 | 1/2" | 1-1/16" to 1-3/16"
  - BU8 | 3/4" | 1-3/16" to 1-5/16"
  - A-10 | 7/8" | 1-5/16" to 1-1/2"
  - B14 | 1" | 1-21/32" to 1-15/16"

### Barbed Hose Stems
- **Steel**
  - **Model No.** | **Hose O.D.**
  - DMA | 1/4" x 1/4"
  - DMB | 3/8" x 3/8"
  - DM1 | 1/2" x 1/2"
  - DM6 | 3/4" x 3/4"
  - DM11 | 1" x 1"

### Swivel Barbed Hose Stems
- **Brass**
  - **Model No.** | **MPT** | **Hose I.D.**
  - M7S | 1/4" | 1/4"
  - M13S | 3/8" | 3/8"
  - M17S | 1/2" | 1/2"

### Swivel Fittings
- **Brass**
  - **Model No.** | **MPT** | **FPT**
  - 25US | 1/4" | 1/4"
  - 38US | 3/8" | 3/8"

## Double Bolt Hose Clamps
- **Model No.** | **Hose I.D.** | **Fits Hose O.D.**
  - SL29 | 1/2" | 7/8" to 1-1/8"
  - J4B | 3/4" | 1-1/8" to 1-3/16"
  - JX49 | 1" | 1-7/16" to 1-17/32"
  - DL14 | 1-1/4" | 1-5/8" to 1-13/16"
  - DL20 | 1-1/2" | 1-3/4" to 2-3/4"

## Adapters
- **Brass**
  - **Model No.** | **MPT** | **FPT**
  - H0202 | 1/8" | 1/8"
  - H0402 | 1/4" | 1/8"
  - H0404 | 1/4" | 1/4"
  - H0604 | 3/8" | 1/4"
  - H0606 | 3/8" | 3/8"
  - H0806 | 1/2" | 3/8"
  - H0808 | 1/2" | 1/2"
  - H0809 | 3/4" | 3/4"
  - H0810 | 1" | 1"

## Reducer Bushing
- **Brass**
  - **Model No.** | **MPT** | **FPT**
  - PF20942 | 1/4" | 1/8"
  - PF20962 | 3/8" | 1/8"
  - PF20964 | 3/8" | 1/4"
  - PF20982 | 1/2" | 1/8"
  - PF20984 | 1/2" | 1/4"
  - PF20986 | 1/2" | 3/8"
  - PF209124 | 3/4" | 1/4"
  - PF209126 | 3/4" | 3/8"
  - PF209128 | 3/4" | 1/2"
  - PF209168 | 1" | 1/2"
  - B21612 | 1" | 3/4"

## Hex Nipples
- **Brass**
  - **Model No.** | **MPT** | **FPT**
  - PF22222 | 1/8" | 1/8"
  - PF22242 | 1/8" | 1/4"
  - PF22244 | 1/4" | 1/4"
  - PF22264 | 1/4" | 3/8"
  - PF22266 | 3/8" | 3/8"
  - PF22286 | 3/8" | 1/2"
  - PF22288 | 1/2" | 1/2"

Made in the U.S.A.
Air Line Accessories

Nippon Pneumatic  Model JAC-2
Vacuum Air Cleaner

Inexpensive, efficient tool for cleaning auto interiors. Ideal for repair shops and foundries for vacuuming scrap and dust instead of blowing off.
• Compact and lightweight
• Tremendous vacuuming power
• Venturi Style

Michigan Pneumatic  Model BLS
Safety Air Blow Gun

The first air duster ever made with a conical air curtain system to protect workers from injury. OSHA approved.
• 1/4" male inlet
• Eliminates blowing metal chips
• Adjustable air curtain angle
• Designed for safety and efficiency

Michigan Pneumatic  Model 336-RT
Rubber-Tip Blow Gun

• Handy hang-up hook
• Rugged construction
• 1/4" female inlet
• Ideal for use on delicate surfaces
• Extension blow guns available

Safety Brush Blow Gun

Exclusive 2-in-1 safety brush blow gun features a standard blow gun with a choice of built-in wire, nylon or horsehair brushes for fast, easy air-blast cleaning. Blow brush conforms to OSHA standards. Replacement brushes available.

Blow/Vacuum Gun

A two-in-one cleaning gun for high powered vacuum cleaning or precise, high-velocity air pressure cleaning of machine tools. Also useful for cooling industrial and manufacturing processes. Deep hole gun kit available.

Vacuum gun features:

- Body
- O-Ring
- Venturi
- O-Ring
- End Section
- Trigger Assembly

Positive Grip Air Chuck  Model CHAP-4400

1/4" I.D. x 12" hose with brass ball chuck and 1/4" female swivel fittings. Ideal for up to 250 psi.

Tire Inflation Gauge  Model TGC-090

Rugged, compact, lightweight and sturdy. Designed for cars and trucks. Features aluminum casting and solid brass dial calibrated from 10-90 psi in 2 lb. increments.

Safety Air Blow Gun  Model F5048AA

Lightweight, heavy-duty aluminum extension provides longer reach for cleaning hard-to-reach areas. Delivers full power from the air compressor. Side ports draw ambient air inward, intensifying the volume of air power at the tip. Meets OSHA safety standards.
• Dead-man trigger
• Adjustable auxiliary handle

Safety Blow Gun

Model 801S  Safety blow gun with steel brush
Model 802S  Safety blow gun with nylon brush
Model 803S  Safety blow gun with horsehair brush
Model 810K  Safety blow gun kit with all 3 brushes: steel, nylon and horsehair

<table>
<thead>
<tr>
<th>Inlet PSI</th>
<th>Thrust (lb.-ft.)</th>
<th>Flow (SCFM)</th>
<th>Dead End PSI</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>13</td>
<td>170</td>
<td>15</td>
</tr>
<tr>
<td>100</td>
<td>16</td>
<td>208</td>
<td>17</td>
</tr>
<tr>
<td>120</td>
<td>18</td>
<td>244</td>
<td>21</td>
</tr>
<tr>
<td>(max.) 150</td>
<td>24</td>
<td>302</td>
<td>29</td>
</tr>
</tbody>
</table>
Air Movers/Ventilators

**Michigan Pneumatic Venturi Style Air Movers**

Michigan Pneumatic venturi style air movers are used in many industrial and construction sites where there is a need to disperse hazardous fumes, move air into a confined space, cool individuals in elevated temperature conditions, or ventilate equipment and machinery with a blast of directed air. Common applications include shipyards, refineries, chemical plants, paper mills and manhole ventilation.

- No moving parts
- Minimal required maintenance
- Can be used as a blower or for exhaust
- Safe in hazardous areas
- Performance tested
- Lightweight and portable

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Overall Length</th>
<th>Base Diameter</th>
<th>Top of Horn Diameter</th>
<th>Bolt Circle Diameter</th>
<th>Base Slot Diameter</th>
<th>Weight</th>
<th>Air Inlet Thread</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-3AMS</td>
<td>16.75&quot;</td>
<td>7.31&quot;</td>
<td>6.00&quot;</td>
<td>6.56&quot;</td>
<td>0.4&quot;</td>
<td>6.2 lbs.</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>MP-3AM</td>
<td>30.50&quot;</td>
<td>7.31&quot;</td>
<td>7.00&quot;</td>
<td>6.56&quot;</td>
<td>0.4&quot;</td>
<td>9.2 lbs.</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>MP-6AM</td>
<td>44.25&quot;</td>
<td>11.25&quot;</td>
<td>12.50&quot;</td>
<td>10.50&quot;</td>
<td>0.4&quot;</td>
<td>23.2 lbs.</td>
<td>1&quot;</td>
</tr>
<tr>
<td>MP-8AM</td>
<td>46.06&quot;</td>
<td>14.37&quot;</td>
<td>14.25&quot;</td>
<td>13.62&quot;</td>
<td>0.5&quot;</td>
<td>35.2 lbs.</td>
<td>1&quot;</td>
</tr>
<tr>
<td>MP-10AM</td>
<td>48.00&quot;</td>
<td>17.00&quot;</td>
<td>15.75&quot;</td>
<td>15.50&quot;</td>
<td>1.0&quot;</td>
<td>41.6 lbs.</td>
<td>1&quot;</td>
</tr>
<tr>
<td>JF20</td>
<td>12.50&quot;</td>
<td>27.00&quot;</td>
<td>-</td>
<td>* 20.00&quot;</td>
<td>1.0&quot;</td>
<td>95.0 lbs.</td>
<td>3/4&quot;</td>
</tr>
</tbody>
</table>

* Matches American Petroleum Institute tank opening

**Inlet Pressure - Total Air Flow**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>40 psig</th>
<th>60 psig</th>
<th>80 psig</th>
<th>100 psig</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-3AMS</td>
<td>815 cfm</td>
<td>981 cfm</td>
<td>1182 cfm</td>
<td>-</td>
</tr>
<tr>
<td>MP-3AM</td>
<td>1017 cfm</td>
<td>1231 cfm</td>
<td>1462 cfm</td>
<td>-</td>
</tr>
<tr>
<td>MP-6AM</td>
<td>2385 cfm</td>
<td>2885 cfm</td>
<td>3347 cfm</td>
<td>-</td>
</tr>
<tr>
<td>MP-8AM</td>
<td>3152 cfm</td>
<td>4152 cfm</td>
<td>4929 cfm</td>
<td>-</td>
</tr>
<tr>
<td>MP-10AM</td>
<td>4898 cfm</td>
<td>6182 cfm</td>
<td>7304 cfm</td>
<td>-</td>
</tr>
<tr>
<td>JF20</td>
<td>5920 cfm</td>
<td>7600 cfm</td>
<td>9100 cfm</td>
<td>10420 cfm</td>
</tr>
</tbody>
</table>

**Michigan Pneumatic Model JF20 Jet Fan**

Features a heavy-duty, hi-tech, four blade design that is versatile for a wide range of applications. Can be used either as a blower or an exhauster, and is well suited for confined areas for the removal of hazardous fumes or contaminated air from applications such as welding or sand blasting.

- Six turbulence-eliminating guide vanes
- Operates at lower RPMs while moving more air
- Heat treated to T6 aircraft aluminum specifications
- Stainless steel fan guard meets OSHA standards
- Use for general ventilation

**Inlet Pressure - Air Consumption**

<table>
<thead>
<tr>
<th>Model No.</th>
<th>40 psig</th>
<th>60 psig</th>
<th>80 psig</th>
<th>100 psig</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-3AMS</td>
<td>36 scfm</td>
<td>50 scfm</td>
<td>62 scfm</td>
<td>-</td>
</tr>
<tr>
<td>MP-3AM</td>
<td>35 scfm</td>
<td>45 scfm</td>
<td>62 scfm</td>
<td>-</td>
</tr>
<tr>
<td>MP-6AM</td>
<td>73 scfm</td>
<td>98 scfm</td>
<td>124 scfm</td>
<td>-</td>
</tr>
<tr>
<td>MP-8AM</td>
<td>114 scfm</td>
<td>152 scfm</td>
<td>193 scfm</td>
<td>-</td>
</tr>
<tr>
<td>MP-10AM</td>
<td>154 scfm</td>
<td>209 scfm</td>
<td>274 scfm</td>
<td>-</td>
</tr>
<tr>
<td>JF20</td>
<td>60 scfm</td>
<td>114 scfm</td>
<td>186 scfm</td>
<td>292 scfm</td>
</tr>
</tbody>
</table>

Pneumatic air movers have been tested at an independent laboratory. The free flow ratings listed above are based on tests to AMCA Standard 210. Under identical testing situations, pneumatic air movers equalled or exceeded the air flow of competitively manufactured air movers.
<table>
<thead>
<tr>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
</tr>
<tr>
<td>Aircraft Accessories ........33, 102-104</td>
</tr>
<tr>
<td>Air Hammers - Automotive 98-99, 104</td>
</tr>
<tr>
<td>Air Hoists .......................... 138</td>
</tr>
<tr>
<td>Air Hose ............................... 154, 157</td>
</tr>
<tr>
<td>Air Line Accessories ...........152-160</td>
</tr>
<tr>
<td>Air Marking Pen ......................... 91</td>
</tr>
<tr>
<td>Air Movers .......................... 161</td>
</tr>
<tr>
<td>Air Nippers .......................... 76</td>
</tr>
<tr>
<td><strong>B</strong></td>
</tr>
<tr>
<td>Balancers ............................ 148-149</td>
</tr>
<tr>
<td>Beam Clamps ........................ 144</td>
</tr>
<tr>
<td>Bench Grinders ......................... 73</td>
</tr>
<tr>
<td>Bevelers ............................. 82</td>
</tr>
<tr>
<td>Blow Guns ............................ 160</td>
</tr>
<tr>
<td><strong>C</strong></td>
</tr>
<tr>
<td>C-Clamps ................................ 150</td>
</tr>
<tr>
<td>Car Shaker ............................ 151</td>
</tr>
<tr>
<td>Caulking Gun ........................... 151</td>
</tr>
</tbody>
</table>
| Chain Hoists ..........................
| Air ..................................... 138 |
| Hand .................................... 139-141 |
| Lever ................................... 142-143 |
| Chain Pullers ........................ 142-143 |
| Chipping Hammers .................109-111, 114 |
| Accessories .......................... 112-114, 155 |
| Chisels ............................
| Chipping Hammer ..................... 112 |
| Clay Digger .......................... 132-133 |
| Panel Cutter ..................... 102-103, 108 |
| Pavement Breaker .................132-133 |
| Rivet Buster ..................... 102-103, 108 |
| Riveter ................................ 108 |
| Weldflux Scalier ................... 119 |
| Zip Gun ................................ 102-103 |
| Chucks ................................ 24, 38-39, 42 |
| Clamps .................................. 144, 150, 157, 159 |
| Clay Diggers .......................... 129 |
| Accessories ........................ 129, 132-133, 155 |
| Collets & Collet Inserts ..........59-61 |
| Compression Riveters ..............92-93 |
| Concrete Vibrators .................. 135 |
| Confined Space Ventilators ..........161 |
| Connectors ............................ 137, 158-159 |
| Construction Equip. ..........105-108, 124-137 |
| Core Knock-Out Tool ...............114 |
| Couplers ............................. 137, 158-159 |
| Cut-Off, Utility ....................... 74 |
| Cutting Tools ........................ 43, 74-85 |
| **D** |
| Die Grinders .......................... 53-58 |
| Accessories .......................... 59-61 |
| Drill Chucks ........................ 24, 38-39, 42 |
| Drills .............................
| Accessories .......................... 33, 38-39, 42, 134-137 |
| 1/4"-1/2" ............................. 30-32, 34-35 |
| 9/16"-3" .............................. 36-37, 39-41, 43 |
| Angle .................................. 30, 32 |
| Corner .................................. 41 |
| Heavy-Duty ........................... 32, 34-37, 40-41 |
| Magnetic ................................ 43 |
| Non-Reversible ......................... 30-32, 34-35, 41 |
| Reversible ............................ 30-31, 34-37, 40 |
| Rock .................................. 136 |
| Wood Borer ........................... 36-37, 40 |
| **E** |
| Electric Tools ......................... 75, 79-84 |
| Engraving Tools ....................... 91 |
| **F** |
| Filing Tools .......................... 52, 77 |
| Filters .................................. 153 |
| Fittings ............................... 155, 158-159 |
| Foot Control Pedal ..................... 95-96 |
| **G** |
| Gauges ............................ 152-153 |
| Grease Guns ........................... 151 |
| **H** |
| Hammers ..............................
| Accessories .......................... 101-105, 112-114 |
| 119, 120, 134-135, 155 |
| Automotive .......................... 99, 104 |
| Chipping .............................. 109-111, 114 |
| Clay Diggers .......................... 129 |
| Nail Driving Attachment ..........101, 105 |
| One-Shot .............................. 98 |
| Palm ................................. 98 |
| Paving ............................... 130-131 |
| Riveting .............................. 105 |
| Roto .................................. 134 |
| Scaling ............................... 115-118, 120, 122-123 |
| Hoists ..............................
| Air ..................................... 138 |
| Hand Chain ........................... 139-141 |
| Lever .................................. 142-143 |
| Tugger ................................ 146-147 |
| Hose, Air ............................. 154, 157 |
| Hose Swivel ........................... 155 |
| Hose Reels ........................... 149 |
| Hydraulic Jacks ....................... 145 |
| Hydraulic Pump ....................... 88 |
| **I** |
| Impact Wrenches ........................
| Accessories .......................... 22-25 |
| Angle .................................. 5,13 |
| Automotive .......................... 4-8 |
| Heavy-Duty .......................... 6, 8, 10, 14-15 |
| Industrial ............................ 9-21 |
| Pistol ............................... 4-10, 15, 20-21 |
| Pulse/Pulsus ......................17-21 |
| Ratchet .............................. 4 |
| Straight .............................. 4, 6, 9-14, 21 |
| Torque Controlled ................... 21 |
| **J** |
| Jacks ..............................
| Toe & Screw .......................... 151 |
| Hydraulic ........................... 145 |
| **L** |
| Lubricators ........................... 152-154 |
| **M** |
| Manifold ............................. 156 |
| Marking Pen ........................... 91 |
| Metal Shears .......................... 80-81, 83 |
## Index

### N

<table>
<thead>
<tr>
<th>Category</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needle Scalers</td>
<td>115-117, 120-121</td>
</tr>
<tr>
<td>Nibblers</td>
<td></td>
</tr>
<tr>
<td>Air</td>
<td>82, 85</td>
</tr>
<tr>
<td>Electric</td>
<td>82, 84</td>
</tr>
<tr>
<td>Nippers</td>
<td>76</td>
</tr>
<tr>
<td>Nutrunners</td>
<td>39</td>
</tr>
</tbody>
</table>

### O

<table>
<thead>
<tr>
<th>Category</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil</td>
<td>155</td>
</tr>
</tbody>
</table>

### P

<table>
<thead>
<tr>
<th>Category</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paint Guns</td>
<td>91</td>
</tr>
<tr>
<td>Pavement Breakers</td>
<td>130-131</td>
</tr>
<tr>
<td>Accessories</td>
<td>132-133</td>
</tr>
<tr>
<td>Planishing Hammer Accessories</td>
<td>104</td>
</tr>
<tr>
<td>Polishers</td>
<td>47-48</td>
</tr>
<tr>
<td>POP Riveters</td>
<td>86-87, 89</td>
</tr>
<tr>
<td>Pullers</td>
<td>142-143</td>
</tr>
<tr>
<td>Pulse/Pulsus Tools</td>
<td>17-21</td>
</tr>
<tr>
<td>Punch/Flange Tools</td>
<td>91</td>
</tr>
</tbody>
</table>

### R

<table>
<thead>
<tr>
<th>Category</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rammers</td>
<td>124-127</td>
</tr>
<tr>
<td>Accessories</td>
<td>128</td>
</tr>
<tr>
<td>Ratchet Wrenches</td>
<td>4</td>
</tr>
<tr>
<td>Regulators</td>
<td>152-153</td>
</tr>
<tr>
<td>Retainers</td>
<td></td>
</tr>
<tr>
<td>Chipper</td>
<td>113-114</td>
</tr>
<tr>
<td>Rivet Buster</td>
<td>108</td>
</tr>
<tr>
<td>Riveter</td>
<td>102-103, 105</td>
</tr>
<tr>
<td>Riveter Pump</td>
<td>88</td>
</tr>
<tr>
<td>Riveters</td>
<td></td>
</tr>
<tr>
<td>Accessories</td>
<td>88-89, 94-97, 101-103, 105, 155</td>
</tr>
<tr>
<td>Aircraft</td>
<td>100-101, 104</td>
</tr>
<tr>
<td>Automotive</td>
<td>98-99, 104</td>
</tr>
<tr>
<td>Blind</td>
<td>86-90</td>
</tr>
<tr>
<td>Chisels</td>
<td>102-103</td>
</tr>
<tr>
<td>Compression</td>
<td>92-93</td>
</tr>
<tr>
<td>Hand</td>
<td>89</td>
</tr>
<tr>
<td>Heavy-Duty</td>
<td>105</td>
</tr>
<tr>
<td>Nail Driving Attachment</td>
<td>101, 105</td>
</tr>
<tr>
<td>One-Shot</td>
<td>198</td>
</tr>
<tr>
<td>POP Rivet Busters</td>
<td>86-89</td>
</tr>
<tr>
<td>Rivet Busters</td>
<td>105-107</td>
</tr>
<tr>
<td>Rivet Sets</td>
<td>97, 103, 105</td>
</tr>
<tr>
<td>Riv-Nut/Rivet-Nut</td>
<td>88, 90</td>
</tr>
<tr>
<td>Squeezer Accessories</td>
<td>88, 94-97</td>
</tr>
<tr>
<td>Yoke</td>
<td>92-93</td>
</tr>
</tbody>
</table>

### S

<table>
<thead>
<tr>
<th>Category</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanders</td>
<td></td>
</tr>
<tr>
<td>Accessories</td>
<td>63, 72-73</td>
</tr>
<tr>
<td>Angle</td>
<td>44, 68-69</td>
</tr>
<tr>
<td>Belt</td>
<td>49-50, 63-64</td>
</tr>
<tr>
<td>Disc</td>
<td>44</td>
</tr>
<tr>
<td>Dual Action</td>
<td>45-46</td>
</tr>
<tr>
<td>Jitterbug</td>
<td>51</td>
</tr>
<tr>
<td>Orbital</td>
<td>45-47, 50-51</td>
</tr>
<tr>
<td>Orbital w/Vacuum</td>
<td>45-47</td>
</tr>
<tr>
<td>Palm</td>
<td>46, 50-52</td>
</tr>
<tr>
<td>Right Angle</td>
<td>44, 68-69</td>
</tr>
<tr>
<td>Straight</td>
<td>52</td>
</tr>
<tr>
<td>Vacuum Assisted</td>
<td>45-47</td>
</tr>
<tr>
<td>Vertical</td>
<td>48</td>
</tr>
<tr>
<td>Water Feed</td>
<td>69</td>
</tr>
<tr>
<td>Sand Ramers</td>
<td>124-127</td>
</tr>
<tr>
<td>Accessories</td>
<td>128</td>
</tr>
<tr>
<td>Saws</td>
<td></td>
</tr>
<tr>
<td>Accessories</td>
<td>77-78</td>
</tr>
<tr>
<td>Band</td>
<td>79</td>
</tr>
<tr>
<td>Chain</td>
<td>79</td>
</tr>
<tr>
<td>Circular</td>
<td>74-75</td>
</tr>
<tr>
<td>Concrete</td>
<td>79</td>
</tr>
<tr>
<td>Panel</td>
<td>74-75</td>
</tr>
<tr>
<td>Reciprocating</td>
<td>77-78</td>
</tr>
<tr>
<td>Rotary</td>
<td>74-75</td>
</tr>
<tr>
<td>Scaling Hammers</td>
<td></td>
</tr>
<tr>
<td>Accessories</td>
<td>112-113, 119</td>
</tr>
<tr>
<td>Concrete</td>
<td>122-123</td>
</tr>
<tr>
<td>Long Reach</td>
<td>118</td>
</tr>
<tr>
<td>Needle</td>
<td>115-117, 120-121</td>
</tr>
<tr>
<td>Piston</td>
<td>122-123</td>
</tr>
<tr>
<td>Triplex</td>
<td>122-123</td>
</tr>
<tr>
<td>Weldflux</td>
<td>115-118, 120</td>
</tr>
<tr>
<td>Scissor Shears</td>
<td>80-81, 83</td>
</tr>
<tr>
<td>Screwdrivers</td>
<td>4, 18-20, 26-29</td>
</tr>
<tr>
<td>Accessories</td>
<td>24-25</td>
</tr>
<tr>
<td>Scribe</td>
<td>91</td>
</tr>
<tr>
<td>Shears</td>
<td></td>
</tr>
<tr>
<td>Air</td>
<td>80-81, 83</td>
</tr>
<tr>
<td>Electric</td>
<td>80-81, 83</td>
</tr>
<tr>
<td>Sockets, Impact</td>
<td>22-24</td>
</tr>
<tr>
<td>Spray Guns</td>
<td>91</td>
</tr>
<tr>
<td>Springs, Retainer</td>
<td></td>
</tr>
<tr>
<td>Chipper</td>
<td>113-114</td>
</tr>
<tr>
<td>Rivet Buster</td>
<td>108</td>
</tr>
<tr>
<td>Riveter</td>
<td>102-103</td>
</tr>
</tbody>
</table>

### T

<table>
<thead>
<tr>
<th>Category</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tampers</td>
<td>126-127</td>
</tr>
<tr>
<td>Tappers</td>
<td>35</td>
</tr>
<tr>
<td>Tire Gauge</td>
<td>160</td>
</tr>
<tr>
<td>Tool Balancers</td>
<td>148-149</td>
</tr>
<tr>
<td>Torque Controlled, Impacts</td>
<td>21</td>
</tr>
<tr>
<td>Trimmers</td>
<td>74, 76</td>
</tr>
<tr>
<td>Trolleys</td>
<td>144</td>
</tr>
<tr>
<td>Tuggers</td>
<td>146-147</td>
</tr>
</tbody>
</table>

### U

<table>
<thead>
<tr>
<th>Category</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universal Couplings</td>
<td>159</td>
</tr>
<tr>
<td>Utility Cut-Off</td>
<td>74</td>
</tr>
</tbody>
</table>

### V

<table>
<thead>
<tr>
<th>Category</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacuums, Air Cleaner</td>
<td>160</td>
</tr>
<tr>
<td>Ventilators/Air Movers</td>
<td>161</td>
</tr>
<tr>
<td>Vertical Grinders</td>
<td>70-71</td>
</tr>
<tr>
<td>Vertical Sanders</td>
<td>48</td>
</tr>
<tr>
<td>Vibrators</td>
<td>135, 151</td>
</tr>
<tr>
<td>Vises</td>
<td>151</td>
</tr>
</tbody>
</table>

### W

<table>
<thead>
<tr>
<th>Category</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weldflux Scalers</td>
<td>115-118, 120</td>
</tr>
<tr>
<td>Winches</td>
<td>146-147</td>
</tr>
<tr>
<td>Wire Brush/Wheel</td>
<td>72</td>
</tr>
<tr>
<td>Wire Trimmers</td>
<td>76</td>
</tr>
<tr>
<td>Wood Borers</td>
<td>36-37, 40</td>
</tr>
</tbody>
</table>

### Z

<table>
<thead>
<tr>
<th>Category</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zip Guns</td>
<td>99-101</td>
</tr>
</tbody>
</table>

As a valuable link in your supply chain, Michigan Pneumatic maintains an enormous warehouse inventory.

If you are unable to find the items you require, please call our Customer Service Staff:

1-800-521-8104
## Torque Conversion

### Ft.-Lbs. to Newton Meters (Nm)

<table>
<thead>
<tr>
<th>Ft.-Lbs.</th>
<th>Nm</th>
<th>Ft.-Lbs.</th>
<th>Nm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.356</td>
<td>11</td>
<td>77.3</td>
</tr>
<tr>
<td>2</td>
<td>2.7</td>
<td>12</td>
<td>75.0</td>
</tr>
<tr>
<td>3</td>
<td>4.1</td>
<td>13</td>
<td>72.9</td>
</tr>
<tr>
<td>4</td>
<td>5.4</td>
<td>14</td>
<td>70.5</td>
</tr>
<tr>
<td>5</td>
<td>6.8</td>
<td>15</td>
<td>68.2</td>
</tr>
<tr>
<td>6</td>
<td>8.1</td>
<td>16</td>
<td>65.9</td>
</tr>
<tr>
<td>7</td>
<td>9.5</td>
<td>17</td>
<td>63.7</td>
</tr>
<tr>
<td>8</td>
<td>10.9</td>
<td>18</td>
<td>61.5</td>
</tr>
<tr>
<td>9</td>
<td>12.2</td>
<td>19</td>
<td>59.2</td>
</tr>
<tr>
<td>10</td>
<td>13.6</td>
<td>20</td>
<td>57.0</td>
</tr>
<tr>
<td>11</td>
<td>14.9</td>
<td>21</td>
<td>54.8</td>
</tr>
<tr>
<td>12</td>
<td>16.3</td>
<td>22</td>
<td>52.5</td>
</tr>
<tr>
<td>13</td>
<td>17.6</td>
<td>23</td>
<td>50.2</td>
</tr>
<tr>
<td>14</td>
<td>19.0</td>
<td>24</td>
<td>47.9</td>
</tr>
<tr>
<td>15</td>
<td>20.3</td>
<td>25</td>
<td>45.6</td>
</tr>
<tr>
<td>16</td>
<td>21.7</td>
<td>26</td>
<td>43.3</td>
</tr>
<tr>
<td>17</td>
<td>23.1</td>
<td>27</td>
<td>41.0</td>
</tr>
<tr>
<td>18</td>
<td>24.4</td>
<td>28</td>
<td>38.7</td>
</tr>
<tr>
<td>19</td>
<td>25.8</td>
<td>29</td>
<td>36.4</td>
</tr>
<tr>
<td>20</td>
<td>27.1</td>
<td>30</td>
<td>34.1</td>
</tr>
<tr>
<td>21</td>
<td>28.5</td>
<td>31</td>
<td>31.8</td>
</tr>
<tr>
<td>22</td>
<td>29.8</td>
<td>32</td>
<td>29.5</td>
</tr>
<tr>
<td>23</td>
<td>31.2</td>
<td>33</td>
<td>27.2</td>
</tr>
<tr>
<td>24</td>
<td>32.5</td>
<td>34</td>
<td>25.0</td>
</tr>
<tr>
<td>25</td>
<td>33.9</td>
<td>35</td>
<td>22.7</td>
</tr>
<tr>
<td>26</td>
<td>35.3</td>
<td>36</td>
<td>20.4</td>
</tr>
<tr>
<td>27</td>
<td>36.6</td>
<td>37</td>
<td>18.1</td>
</tr>
<tr>
<td>28</td>
<td>38.0</td>
<td>38</td>
<td>15.8</td>
</tr>
<tr>
<td>29</td>
<td>39.3</td>
<td>39</td>
<td>13.5</td>
</tr>
<tr>
<td>30</td>
<td>40.7</td>
<td>40</td>
<td>11.2</td>
</tr>
<tr>
<td>31</td>
<td>42.0</td>
<td>41</td>
<td>8.9</td>
</tr>
<tr>
<td>32</td>
<td>43.4</td>
<td>42</td>
<td>6.6</td>
</tr>
<tr>
<td>33</td>
<td>44.8</td>
<td>43</td>
<td>4.3</td>
</tr>
<tr>
<td>34</td>
<td>46.1</td>
<td>44</td>
<td>2.0</td>
</tr>
<tr>
<td>35</td>
<td>47.5</td>
<td>45</td>
<td>1.9</td>
</tr>
<tr>
<td>36</td>
<td>48.8</td>
<td>46</td>
<td>1.8</td>
</tr>
<tr>
<td>37</td>
<td>50.2</td>
<td>47</td>
<td>1.7</td>
</tr>
<tr>
<td>38</td>
<td>52.0</td>
<td>48</td>
<td>1.6</td>
</tr>
<tr>
<td>39</td>
<td>52.9</td>
<td>49</td>
<td>1.5</td>
</tr>
<tr>
<td>40</td>
<td>54.2</td>
<td>50</td>
<td>1.4</td>
</tr>
<tr>
<td>41</td>
<td>55.6</td>
<td>51</td>
<td>1.3</td>
</tr>
<tr>
<td>42</td>
<td>57.0</td>
<td>52</td>
<td>1.2</td>
</tr>
<tr>
<td>43</td>
<td>58.3</td>
<td>53</td>
<td>1.1</td>
</tr>
<tr>
<td>44</td>
<td>60.0</td>
<td>54</td>
<td>1.0</td>
</tr>
<tr>
<td>45</td>
<td>61.0</td>
<td>55</td>
<td>0.9</td>
</tr>
<tr>
<td>46</td>
<td>62.4</td>
<td>56</td>
<td>0.8</td>
</tr>
<tr>
<td>47</td>
<td>63.7</td>
<td>57</td>
<td>0.7</td>
</tr>
<tr>
<td>48</td>
<td>65.1</td>
<td>58</td>
<td>0.6</td>
</tr>
<tr>
<td>49</td>
<td>66.4</td>
<td>59</td>
<td>0.5</td>
</tr>
<tr>
<td>50</td>
<td>67.8</td>
<td>60</td>
<td>0.4</td>
</tr>
<tr>
<td>51</td>
<td>69.2</td>
<td>61</td>
<td>0.3</td>
</tr>
<tr>
<td>52</td>
<td>70.5</td>
<td>62</td>
<td>0.2</td>
</tr>
<tr>
<td>53</td>
<td>71.9</td>
<td>63</td>
<td>0.1</td>
</tr>
<tr>
<td>54</td>
<td>73.2</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>74.6</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>56</td>
<td>75.9</td>
<td>66</td>
<td></td>
</tr>
<tr>
<td>57</td>
<td>77.3</td>
<td>67</td>
<td></td>
</tr>
<tr>
<td>58</td>
<td>78.7</td>
<td>68</td>
<td></td>
</tr>
<tr>
<td>59</td>
<td>80.0</td>
<td>69</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>81.4</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>61</td>
<td>82.7</td>
<td>71</td>
<td></td>
</tr>
<tr>
<td>62</td>
<td>84.1</td>
<td>72</td>
<td></td>
</tr>
<tr>
<td>63</td>
<td>85.4</td>
<td>73</td>
<td></td>
</tr>
</tbody>
</table>

### Conversion Tables

In.-Lbs. x 0.113 = Newton Meters (Nm)
Nm x 1.0 = Ft.-Lbs.
Ft.-Lbs. x 1.356 = Nm
Nm x 0.737 = Ft.-Lbs.

### Torque Conversion

#### In.-Lbs. to Newton Meters (Nm)

<table>
<thead>
<tr>
<th>Ft.-Lbs.</th>
<th>Nm</th>
<th>Ft.-Lbs.</th>
<th>Nm</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>0.565</td>
<td>10</td>
<td>1.33</td>
</tr>
<tr>
<td>10</td>
<td>1.13</td>
<td>15</td>
<td>1.70</td>
</tr>
<tr>
<td>15</td>
<td>2.26</td>
<td>20</td>
<td>1.80</td>
</tr>
<tr>
<td>20</td>
<td>2.83</td>
<td>25</td>
<td>2.39</td>
</tr>
<tr>
<td>25</td>
<td>3.39</td>
<td>30</td>
<td>3.96</td>
</tr>
<tr>
<td>30</td>
<td>4.52</td>
<td>35</td>
<td>6.78</td>
</tr>
<tr>
<td>35</td>
<td>5.09</td>
<td>40</td>
<td>7.91</td>
</tr>
<tr>
<td>40</td>
<td>6.73</td>
<td>45</td>
<td>9.04</td>
</tr>
<tr>
<td>45</td>
<td>8.15</td>
<td>50</td>
<td>10.17</td>
</tr>
<tr>
<td>50</td>
<td>9.70</td>
<td>55</td>
<td>11.30</td>
</tr>
<tr>
<td>55</td>
<td>11.0</td>
<td>60</td>
<td>12.40</td>
</tr>
<tr>
<td>60</td>
<td>13.60</td>
<td>65</td>
<td>14.70</td>
</tr>
<tr>
<td>65</td>
<td>16.0</td>
<td>70</td>
<td>17.00</td>
</tr>
<tr>
<td>70</td>
<td>18.10</td>
<td>75</td>
<td>19.20</td>
</tr>
<tr>
<td>75</td>
<td>20.30</td>
<td>80</td>
<td>22.60</td>
</tr>
</tbody>
</table>

### Air Pressure

<table>
<thead>
<tr>
<th>PSI</th>
<th>kPa*</th>
<th>Bar†</th>
</tr>
</thead>
<tbody>
<tr>
<td>90</td>
<td>620</td>
<td>6.0</td>
</tr>
<tr>
<td>95</td>
<td>655</td>
<td>6.5</td>
</tr>
<tr>
<td>100</td>
<td>690</td>
<td>7.0</td>
</tr>
</tbody>
</table>

* Preferred - Approximate to the nearest 5 kPa
† Approximate to the nearest .5 Bar

### Standard Sheet Steel Gauge

<table>
<thead>
<tr>
<th>Gauge</th>
<th>Decimal</th>
<th>Gauge</th>
<th>Decimal</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>.239</td>
<td>12</td>
<td>.104</td>
</tr>
<tr>
<td>4</td>
<td>.224</td>
<td>13</td>
<td>.099</td>
</tr>
<tr>
<td>5</td>
<td>.209</td>
<td>15</td>
<td>.074</td>
</tr>
<tr>
<td>6</td>
<td>.194</td>
<td>16</td>
<td>.067</td>
</tr>
<tr>
<td>7</td>
<td>.179</td>
<td>17</td>
<td>.059</td>
</tr>
<tr>
<td>8</td>
<td>.164</td>
<td>18</td>
<td>.047</td>
</tr>
<tr>
<td>9</td>
<td>.149</td>
<td>19</td>
<td>.041</td>
</tr>
<tr>
<td>10</td>
<td>.134</td>
<td>20</td>
<td>.035</td>
</tr>
</tbody>
</table>

### Lbs. to Kilograms

<table>
<thead>
<tr>
<th>Lbs.</th>
<th>Kg.</th>
<th>Lbs.</th>
<th>Kg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/16</td>
<td>.028</td>
<td>10</td>
<td>4.536</td>
</tr>
<tr>
<td>1/8</td>
<td>.057</td>
<td>11</td>
<td>4.989</td>
</tr>
<tr>
<td>3/16</td>
<td>.085</td>
<td>12</td>
<td>5.443</td>
</tr>
<tr>
<td>1/4</td>
<td>.113</td>
<td>13</td>
<td>5.987</td>
</tr>
<tr>
<td>5/16</td>
<td>.142</td>
<td>14</td>
<td>6.350</td>
</tr>
<tr>
<td>3/8</td>
<td>.170</td>
<td>15</td>
<td>6.804</td>
</tr>
<tr>
<td>7/16</td>
<td>.198</td>
<td>16</td>
<td>7.257</td>
</tr>
<tr>
<td>1/2</td>
<td>.227</td>
<td>17</td>
<td>7.711</td>
</tr>
<tr>
<td>9/16</td>
<td>.255</td>
<td>18</td>
<td>8.165</td>
</tr>
<tr>
<td>5/8</td>
<td>.283</td>
<td>19</td>
<td>8.618</td>
</tr>
<tr>
<td>11/16</td>
<td>.312</td>
<td>20</td>
<td>9.072</td>
</tr>
<tr>
<td>13/16</td>
<td>.369</td>
<td>22</td>
<td>9.979</td>
</tr>
<tr>
<td>7/8</td>
<td>.397</td>
<td>23</td>
<td>10.433</td>
</tr>
<tr>
<td>15/16</td>
<td>.425</td>
<td>24</td>
<td>10.886</td>
</tr>
<tr>
<td>1</td>
<td>.454</td>
<td>25</td>
<td>11.340</td>
</tr>
<tr>
<td>2</td>
<td>.497</td>
<td>26</td>
<td>11.793</td>
</tr>
<tr>
<td>3</td>
<td>.541</td>
<td>27</td>
<td>12.247</td>
</tr>
<tr>
<td>4</td>
<td>.594</td>
<td>28</td>
<td>12.701</td>
</tr>
<tr>
<td>5</td>
<td>.647</td>
<td>29</td>
<td>13.154</td>
</tr>
<tr>
<td>6</td>
<td>.701</td>
<td>30</td>
<td>13.608</td>
</tr>
<tr>
<td>7</td>
<td>.755</td>
<td>31</td>
<td>14.061</td>
</tr>
<tr>
<td>8</td>
<td>.810</td>
<td>32</td>
<td>14.515</td>
</tr>
<tr>
<td>9</td>
<td>.865</td>
<td>33</td>
<td>15.069</td>
</tr>
</tbody>
</table>
Customer Acct. No.: ____________________________
Purchase Order No.: ____________________________
Contact: ____________________________
Company Name: ____________________________
Address: ____________________________
City: ____________________________
State: ____________________________ Zip: ____________________________
Phone: ____________________________ Fax: ____________________________
E-mail: ____________________________

Bill To: (required only if different than billing address)
Reference Purchase Order No.: ____________________________
Contact: ____________________________
Company Name: ____________________________
Address: ____________________________
City: ____________________________
State: ____________________________ Zip: ____________________________
Phone: ____________________________ Fax: ____________________________
E-mail: ____________________________

To ensure fast and accurate delivery, please type or print clearly.

Quantity | Item Number | Description | Unit Price | Total
--- | --- | --- | --- | ---

Subtotal
MI residents add 6% sales tax. If exempt, please enter sales tax # below.
Shipping & Handling
Total

Sales Tax No. (if applicable)
If you require an item not in this catalog, please call and we will obtain it for you.

Method of Payment (please check one)
☐ Check Enclosed $ ____________________________
Please make checks payable to: Michigan Pneumatic Tool, Inc.
Orders over $500.00 require a money order or certified check.
☐ C.O.D.
☐ Open Account (I agree to the terms stated below)
99% of all orders are shipped the same day.
☐ VISA ☐ MasterCard
Credit Card No.: ____________________________ Expires: __________ / ________
V-Code: ____________________________ (3-Digit Code on back of Credit Card)
Signature: ____________________________ Print Name ____________________________

Terms: Net 30 days, FOB Detroit. 1-1/2% service charge per month (18% per annum) will be added on past due invoices. Firms with established credit or an approved Dun & Bradstreet rating will be shipped on an open account basis. New customers without a good rating should submit a completed credit application. Please allow up to three weeks for processing. For immediate delivery, if credit has not yet been established, please indicate above whether to ship your order C.O.D., credit card, or if a check has been enclosed (Some restrictions may apply). Minimum Billing: $25.00 Net ($50.00 if using Credit Card). For information concerning returns or damages/shortages, see page 2. Note: Shipping and handling charges for UPS shipments (items under 150 lbs.) will be added to your credit card, invoice or C.O.D. shipments. When sending a check with your order, add a minimum shipping & handling charge of $8.50. We will bill you for any difference in freight charges. Any shipment over 150 lbs. will be shipped via truck, freight collect, including $5.00 per pallet LTL handling fee.

Prices of any product are subject to change or withdrawal without notice.
America’s Largest and Most Dependable Dealer, Featuring Top Quality, Guaranteed Air Tools & Equipment
**Commercial Credit Application**

<table>
<thead>
<tr>
<th>Date</th>
<th>DUNS Number</th>
<th>Purchase Order Required?</th>
<th>Taxable?</th>
<th>If Tax Exempt, enter Tax Exempt number (certificate copy must be attached)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Company Information**

<table>
<thead>
<tr>
<th>Full Legal Business Name</th>
<th>Billing Phone Number</th>
<th>E-mail Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>DBA or AKA</td>
<td>Billing Fax Number</td>
<td>Shipping Phone Number</td>
</tr>
<tr>
<td></td>
<td>(                    )</td>
<td>(               )</td>
</tr>
<tr>
<td>Shipping Address</td>
<td>City</td>
<td>State Zip Code</td>
</tr>
<tr>
<td></td>
<td>(                    )</td>
<td>(               )</td>
</tr>
</tbody>
</table>

**Business Credit Information**

<table>
<thead>
<tr>
<th>Name of Principal(s), Authorized Officer(s) or Owner(s)</th>
<th>Title(s)</th>
<th>Home Address</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of Person Responsible for Paying Invoices</th>
<th>Title</th>
<th>Phone Number</th>
<th>Number of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Taxpayer ID Number</th>
<th>In Business Since</th>
<th>Number of Locations</th>
<th>Estimated Annual Sales</th>
<th>Names of Persons Authorized to Make Purchases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Company Type (check one)</th>
<th>Sole Proprietorship</th>
<th>Partnership</th>
<th>Corporation</th>
<th>Other (please specify)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Trade & Bank References** (please supply companies which are well rated with Dun & Bradstreet)

<table>
<thead>
<tr>
<th>Trade Reference Name</th>
<th>Contact</th>
<th>Phone Number</th>
<th>Fax Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>City</td>
<td>State Zip Code</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trade Reference Name</th>
<th>Contact</th>
<th>Phone Number</th>
<th>Fax Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>City</td>
<td>State Zip Code</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trade Reference Name</th>
<th>Contact</th>
<th>Phone Number</th>
<th>Fax Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>City</td>
<td>State Zip Code</td>
<td></td>
</tr>
</tbody>
</table>

**Bank Name**

<table>
<thead>
<tr>
<th>Phone Number</th>
<th>Fax Number</th>
<th>Contact</th>
<th>Checking Account Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bank Address</th>
<th>City</th>
<th>State</th>
<th>Zip Code</th>
<th>Savings Account Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Guaranty Agreement**

In consideration of the extension of credit, granted by Michigan Pneumatic Tool, Inc. ("Seller"), the undersigned does hereby unconditionally guaranty payment of whatever amount the Credit Applicant, named above, shall at any time owe to Seller on account of goods and materials hereafter delivered, furnished or supplied, whether said indebtedness is in the form of notes, bills or open account. This shall be an open and continuing guaranty, and shall continue in force notwithstanding any change in the form of such indebtedness, or renewals of extensions granted by Seller, without obtaining any consent thereto, and until expressly revoked by written notice from me to you, and any such revocation shall not, in any manner, affect my liability as to any indebtedness contracted for prior thereto. The undersigned Guarantor further agrees to pay all expenses, including court costs, attorney’s fees paid or incurred by the Seller in collection of any or all amounts owed them by the Credit Applicant or in enforcing this Guaranty Agreement.

This guaranty shall be a continuing, absolute and unconditional guaranty, and shall be enforceable by Seller, its successor or assigns. All diligence in collection or protection, and all presentment, demand, protest, and/or notice of dishonor, default, nonpayment, or of the creation and existence of any and all guaranteed debts, and of any and all extensions of credit and indulgence hereunder, are expressly waived. The liability of the undersigned Guarantor(s) shall be joint and several. Payment from the Guarantor of monies due and owing as a result of this Guaranty Agreement shall be due upon demand by Seller.

The undersigned represents and warrants that all of the information provided in this Commercial Credit Application is true and accurate and that Seller may rely upon it in deciding to grant credit.

If this credit application is approved, I agree to your terms of Net 30 Days. A finance charge of 1-1/2% per month, 18% per annum, will be added on past due invoices.

Print Name: ___________________________  Print Name: ___________________________

Address: ___________________________  Address: ___________________________

Sign Individually: ____________________  Sign Individually: ____________________

Date: ___________________________  Date: ___________________________
Air Tool Repair Service
Let Michigan Pneumatic Tool Be Your Service Department

- All tools are completely torn down.
- Every part is carefully inspected for wear and tear.
- All worn parts are replaced.
- Every part is thoroughly cleaned and degreased.
- Tools are reassembled to manufacturer’s specifications.
- Every tool is inspected with air consumption meters, tachometers and torque calibrators.
- Fast service is standard procedure. Estimates are provided upon request, or when the cost to repair exceeds 50% of the new tool price.

Your Satisfaction with MPT’s Quality and Performance is Guaranteed

Repair Service Rental Fleet

Michigan Pneumatic Tool is here to back you up. Need a tool while your tool is being serviced? Rent a replacement to keep your job site running. Michigan Pneumatic Tool stocks a complete line of air tools and material handling equipment. From impact wrenches, rivet busters and hoists to massive tuggers, Michigan Pneumatic Tool is standing by to meet your daily demands. Call today for a quote.

Maintenance and Lubrication

All Michigan Pneumatic air tools are built to withstand the most rigorous applications. Receive your money’s worth from your tools by maintaining and operating them properly. Proper tool installation, care and regularly scheduled preventive maintenance can more than double tool life. Proper air line filters, regulators and lubricators will also increase tool efficiency.

Air Supply
Optimum air tool performance is based on a clean, dry air supply that delivers 90 psi of air pressure at the tool, while the tool is running. Lower air pressure will reduce the efficiency of the tool. Air line filters will effectively eliminate moisture and corrosive particles from the air supply. To get the ultimate in performance from your air tool’s ample air compressor capacity, proper air hoses and fittings are essential.

Lubrication
Proper lubrication is the most important requirement in preventive maintenance. The majority of tool failures can be linked to inadequate lubrication. Tools should be oiled daily through the air inlet or through the lubricators. Air line lubricators automatically provide oil to tools allowing them to operate at peak efficiency. Use a light oil similar to a #10 spindle oil, or Michigan Pneumatic oil for best results.

Periodic Inspection
For maximum performance and protection of your air operated equipment, inspect all tools regularly to prevent unnecessary damage and prevent downtime. All air line accessories should be checked on a regular basis.